

1. INTRODUCTION

The adoption of the Jefferson County, West Virginia, Comprehensive Plan in 2004 and the desire to make the County's current land development related ordinances more accessible and up-to-date was the prime motivator for the current effort to rewrite the County's zoning and subdivision ordinances. This is the first step in that process: formulating a "roadmap" for drafting new zoning and subdivision codes. This effort should be completed by March 2007.

This analysis phase of the project was begun with a consultant field reconnaissance trip and a series of public meetings with citizen groups and "stakeholders" having an interest in improving the regulations. The public input process will continue as this report is reviewed and the rewriting commences.

Currently, the County has five ordinances that directly or indirectly regulate land development:

- Zoning and Land Development Ordinance
- Subdivision Ordinance
- Improvement Location Permit Ordinance
- Flood Plain Management Ordinance
- Salvage Yard Ordinance

The Zoning and Land Development Ordinance was originally adopted in 1988 and has been extensively amended over the past 18 years. The Subdivision Ordinance dates from 1979. The Salvage Yard Ordinance was adopted in 1984, and both the Improvement Location Permit Ordinance and the Flood Plain Management Ordinance date back to 1975. The rewrite will combine Flood Plain and Salvage Yard provisions with zoning. Relevant parts of the Improvement Management Ordinance will be integrated into administrative sections of both codes.

In addition to combining the codes, there are several other important goals – ensuring the codes are easy to use, bringing the document up-to-date with current planning practice, eliminating problems, and implementing the comprehensive plan that was adopted in 2004.

1.1. User-Friendly Documents

The purpose of any code rewrite is to make the document “user-friendly.” One element that can make codes difficult to read is the structure of the code—its organization—in a logical manner that presents critical information at the beginning. A second element for making a code easy to read is the use of simple, non-“legalese” language and sentence structure. A third element is the use of tables and illustrations.

Who is the user being targeted in evaluating whether the code is user-friendly? It is the average citizens and business people of the community. History has shown that, due to frequent and repetitious use, municipal staffs are able to administer even the most confusing and difficult codes; local zoning attorneys do likewise. In fact, being the source of understanding is often a source of power, profit, or job security. On the other hand, citizens are not trained in planning and zoning and are likely to obtain or read the code only rarely. Homebuyers researching zoning to determine what can happen around their property needs to be able to find answers quickly. Business owners are another target group; the average businessperson may become involved in zoning only one time—when they want to build or expand their business. The code should be designed for these users.

In critiquing the current zoning, these groups are the standard audience used to judge user-friendliness. Elected and appointed officials and others who use the code more frequently will likewise benefit from user-friendly organization, structure, and technical aspects of the code. The term “organization” refers to the overall design of the text into articles, chapters and sections and the logic of their relationship and clarity. The relationships between sections and overlapping standards are also areas that must be reviewed.

1.2 Report Organization

The “Organization” parts of this report focus on the details of the codes drafting, including outlining, sentence structure, and the use of charts or graphics. Word usage is important but difficult because terms need to be precise; there are often difficult technical sections such as storm water management, engineering, and other construction or development related issues.

The “Technical Aspects” ultimately are about how well the code achieves its objectives and implements the comprehensive plan. This portion also looks at how well the code addresses current land use issues and is structured to address new issues. Does the code encourage or discourage good design? Technical aspects also evaluate how the code can be expected to implement the adopted comprehensive plan.

One problem with codes is that, over time, land use terms become obsolete and new land uses emerge. Gas stations are an example of this issue. In the past 50 years, they have changed from a motor fueling and repair service enterprise to an occupancy that combines fuel sales, a convenience store, car wash, and often restaurant(s)—all on the same premises. The repair function has disappeared from nearly all gas stations, and

that use evolved into several separate specialties: tire, oil changes, mufflers, transmissions, engine repair, and body shops. The review will look for obsolete terms and seek to identify uses that should be covered.

Another technical issue is how well the code guides development. For several reasons discussed later in this analysis, the current code has not been effective in managing urban and suburban growth or protecting agricultural areas that are truly rural. A review of the code will look more effective methods to implement the comprehensive plan, but will also identify trends in land use. Are there new uses or development types that the County is likely to confront in the next 20 years? The County will have to make decisions on whether it is concerned with these trends.

While the Jefferson County Zoning and Land Development Code is less than 20 years old, it differs little in its approach to planning practices that are much older—it just has fewer districts. Planning has evolved greatly in the past 25 years, and a major effort will be made to bring to the code the best planning practices. This will be closely coordinated with the recommendation of the Comprehensive Plan. That plan makes much land use recommendations that need to be included in the land development code.

Also, there have been many changes to the County in the past 20 years. Population growth, suburbanization, municipal annexations, utility extensions, and major highway improvements are a few of the dramatic changes that continue to change the character of the landscape. The growth management provisions found in the current code, most notably the “Agricultural Land Evaluation and Site Assessment” (LESA) system, were intended for use in extremely rural locations—areas not experiencing the intense development pressures found at what has now become the front-edge of the D.C. to New York complex.

A completely different look at the code is quality related. Does strict application of the present code produce development of which the community is universally proud? Are the majority of applications some form of planned development or conditional use because that gives the County the control that is not otherwise provided by the basic standards of the code? In interviewing staff, officials, and citizens, we have sought to determine how well satisfied the community is with the standards of the code. This document will explore other approaches so that the community can review the code and set standards that will guide growth for the next 20 years.

2. ORGANIZATION

Structure of Codes

Each of the five existing development-related codes listed earlier are standalone ordinances. Although they have not been fully codified into a single “county code” book, they have been sufficiently consolidated to reflect the amending ordinances and their citations in the appropriate locations. Equally important, the five ordinances are structurally consistent with one another in terms of “articles,” “sections,” and their

hierarchical numbering system. The current outline structure of the codes is shown in Figure 1.

In the Zoning and Land Development Ordinance, there are 13 articles, all with one or more layers of sections. In 1998, an article (Wireless Telecommunications Facilities) was

inserted between existing Articles 4 and 5. To provide for this insertion without renumbering all subsequent chapters and sections, the new article was listed as Article 4B, and the preceding section (Home Occupations and Cottage Industries) was renumbered as 4A.

The Subdivision Ordinance is structured similarly to the Zoning and Land Development Ordinance but has 18 articles. Several of these articles are

relatively short and, if the ordinance was to be modified rather than replaced, could be consolidated. A few of other chapters of the Subdivision Ordinance appear to contain provisions that should be moved to the zoning ordinance (e.g., Article 7, Community Impact Statement and Article 10, Requirements for Mobile Home Parks and Campgrounds).

Amendments to the Subdivision Ordinance are indicated with a series of typographical symbols (e.g., @ # %) that are keyed to an accompanying list of amending ordinances. While the references appear to be accurate, this method of annotation detracts from the document's readability.

The current Improvement Location Permit Ordinance was adopted in 1975 when there was no County zoning ordinance. It appears that many of the provisions in this ordinance have been superseded by the various application requirements in both the current Zoning and Subdivision Ordinances. Those appropriate procedures in the Location Permit Ordinance will be merged into the new Zoning and Subdivision ordinance, so that this ordinance can be repealed with the adoption of the new ordinances.

It is proposed to make slight modifications to the structure of the codes by adding a new heading layer. Within the various articles, major topics should be divided into "divisions" and, then, the divisions into sections. This allows a clearer delineation of

content. Figure 2 illustrates the revised organization. The numbering system, as well as the name, designates the difference between the articles, divisions, and section. Articles are designated with a single number. The divisions carry a single-place decimal of the article number (the third

Figure 1

Existing Structure

ARTICLE 1: [ARTICLE TITLE]

Section 1.0 [Section Title]
(a) [Subsection Title]
1. [Text]
a. [Text]
(a) [Text]

Figure 2

Proposed Structure

ARTICLE 1: [ARTICLE TITLE]

DIVISION 1.1

Section 1.101 [Section Title]
(b) [Subsection Title]
1. [Text]
a. [Text]
(a) [Text]

division in Article 4 would be 4.3). Section numbers are subsets of the division and would be numbered with three decimal places (the third section in Division 4.3 would be 4.303).

It is important that, whenever possible, the most important elements of the codes are found at the beginning of their respective documents. For zoning, the basic standards of most interest to the citizen (e.g., permitted uses, building setbacks, height, or bulk regulations) should all be grouped together into articles in the earlier parts of the code. Other zoning standards such as signs or parking and loading would follow.

Land development standards constitute the next critical element and differ from the earlier articles in that they focus on the requirements of land development projects, not just buildings and land uses. Provisions such as landscaping, resource protection, parking lot layouts, locations of street entrances, and the like would be included here. Finally, all the administrative provisions would be combined so there was one article on administration. Definitions will be the last section of the new zoning code.

Table 1 depicts the current structure of the Jefferson County's five current development-related ordinances. It also contains the recommended structures of the new zoning and subdivision codes. As mentioned previously, this analysis proposes that the current Improvement Permit Location, Flood Plain Management, and Salvage Yard ordinances be consolidated into the new zoning ordinance. The provisions contained by these three codes are normally found in most zoning ordinances throughout the U.S., and it would make good "housekeeping" sense to merge them at this time.

**Table 1
CODE LAYOUT**

Current Structure					Proposed Structure		
Zoning	Subdivision	Improvement Location Permit	Flood Plain Management	Salvage Yard	Zoning	Subdivision	
1. Purpose, Jurisdiction, Application, etc...	1. Authority, Purpose, and Title	1. Authority, Purpose, and Title	1. Authority, Purpose, and Title	1. Authority, Purpose, Title, and Effective Date	1. Jurisdiction	1. Introduction	
2. Definitions	2. Effective Date, Subdivision Exemptions, etc...	2. Application	2. Application	2. Interpretations and Definitions	2. Establishment of Zoning Districts	2. Subdivision Layout Standards	
3. Administration and Enforcement	3. Interpretations and Definitions	3. Interpretations and Definitions	3. Interpretations and Definitions	3. Permit Procedures and Requirements	3. District Use Standards	3. Subdivision Improvement Requirements	
4. General Provisions	4. General Provisions	4. Administration; Enforcement; Violation; Penalty	4. Identification of Flood-Prone Areas	4. Location and Site Design Standards; Operation Requirements	4. District Intensity and Bulk Standards	4. Dedications and Impact Fees	
4A. Home Occupations and Cottage Industries	5. Minor Subdivision Process and Requirements	5. Appeal; Amendment; Conflict with Other Laws; Validity	5. Flood-Prone Area Requirements	5. Administration, Enforcement, Violations	5. Environmental and Historic Preservation Standards	5. Mapping and Monument Requirements	
4B. Wireless Communications Facilities	6. Subdivision Review Process; Forms and Fees; Dates	15. Bonding	6. Administration; Enforcement; Violation; Penalty	6. Variance, Appeal, Amendment, Conflict with Other Laws; Validity	6. Bonuses	6. Surety	
5. District Establishments, Zoning Maps, etc...	7. Community Impact Statement (CIS)		7. Appeal; Amendment; Conflict with Other Laws; Validity; County Liability		7. Nonconforming Situations	7. Administrative Procedures and Decision Making	
6. Development Review System	8. Requirements for Conventional Subdivisions					8. Land Development Standards	8. Purpose Statements
7. Procedural Requirements for Review	9. Requirements for Condominium Subdivisions					9. Parking, Loading, Access, and Lighting Standards	9. Definitions
8. Appeal Process	10. Requirements for Mobile Home Parks and Campgrounds					10. Landscaping and Tree Protection	
9. Exceptions	11. Requirements for Non-Residential Subdivisions					10. Design and Modulation	
10. Provisions for Signs	12. Land for Parks					11. Sign Regulations	
11. Off-Street Parking Standards	13. Maintenance of Roads and Commonly Used Land					12. Administrative Bodies	
12. Map and Text Amendments	14. Hillside Development					13. Administrative Procedures and Decision Making	
	15. Bonding					14. Enforcement and Legal Status	
	16. Compliance; Administration; Enforcement; etc...					15. Purpose Statements	
	17. Amendment; Variance; Appeal					16. Definitions	
	18. Validity; Conflict with Other Laws						

2.2. Use of Definitions

A group of definitions is a fundamental element most codes or major legal document; these definitions are intended to provide specific, usually narrower, legal meanings to a words or phrases when it is necessary to constrain or modify their meanings for the specific purpose of the code. The use of specifically defined terms can also reduce the wordiness of the code's text. For instance, providing an explicit definition for "Commission" to mean "The Jefferson County Planning and Zoning Commission" allows the code writer to use one word in the place of seven in the text body. Each of the five existing codes has a section containing a series of definitions that apply to its code. An count of definitions for each one is shown in Table 2.

Table 2 Definition Counts	
Ordinance	Definition Count
Zoning and Land Development	122
Subdivision	82
Improvement Location Permit	15
Flood Plain Management	25
Salvage Yard	18

The definitions sections of older, frequently amended codes presents the following challenges:

1. **Duplicate terms with non-matching definitions.** This occurs when a defined term has one specific meaning in one code but a different meaning in another code. An example is shown in Table 3. (It should be noted here that the definition of "agriculture" in the Zoning Ordinance, which was updated in the 2005, while very broad and comprehensive, contains several non-agricultural occupancy types such as commercial storage. Evidently, the definition was broadened with the good intention of increasing the types of uses permitted on a farm. It would have been more appropriate to supplement the list of permitted accessory uses to include these additional uses for their selected districts.)
2. **Unused Definitions.** Often, definitions that are present in the definitions section of a code are not actually used in the text. For instance, the defined term "Modular Unit" in the Zoning Ordinance is not used anywhere in the text.
3. **Unnecessary Definitions.** Many codes contain definitions that are identical, or nearly identical, to their common usage to the extent that defining the term adds no value to interpreting its contextual meaning. For example, in the Jefferson County Zoning Ordinance, the term "Vehicle" is defined as "A means of carrying or transporting something." This definition resembles most dictionary listings for

the term (although many common definitions limit the term “vehicle” to “non-living” conveyances so as to eliminate horses and other animals.)

4. **Outmoded Definitions.** These consist of terms that are no longer in common regulatory usage and have been replaced by more contemporary terms. An example of this is the term, “Mobile Home,” which has been replaced by the industry-accepted term “Manufactured Home” that applies to nearly every manufactured unit built since 1976.

Table 3 Example of Non-Matching Definitions	
Zoning Ordinance	
Defined Term: <i>Agricultural Use</i>	
The use of land for a bona-fide farming operation. This includes: 1. Commercial Agricultural Enterprise, 2. Agriculture, Ranching, 3. Aquaculture, etc...	
Subdivision Ordinance	
Defined Term: <i>Agricultural Activity</i>	
The exclusive use of land for a bona fide farming operation. This includes activities such as dairying, horticulture, floriculture, viticulture, fish culture, etc...	
Improvement Location Permit Ordinance	
Defined Term: <i>Agriculture</i>	
The cultivation of plant crops or the raising of livestock. Agriculture is the organized use of land for the production of plant or animal food, fiber, or landscaped products, etc...	
Flood Plain Management Ordinance	
Agriculture	
The cultivation of plant crops or the raising of livestock. Agriculture is the organized use of land for the production of plant or animal food, fiber, or landscaped products, etc...	
Salvage Yard Ordinance	
Defined Term: <i>Agriculture</i>	
The cultivation of plant crops or the raising of livestock. Agriculture is the organized use of land for the production of plant or animal food, fiber, or landscaped products, etc...	

5. **Ambiguous Definitions.** Occasionally a definition appears to actually obscure a meaning more than clarifying it. In the Zoning and Land Development Ordinance, the following term could create an issue:

“Change of Use Any new use of a building or land which is different than the previous use of a building or land or any change in the Standard Industrial Code in utilizing the Development Review System”

The reverence to the Standard Industrial Classification (SIC) system completely confuses the definition. It should simply read; “**Change of Use** Any new use of a building or land which is different than the previous use of a building or land.” Any discussion of the SIC system should be separate

6. Use of the Standard Industrial Classification (SIC) system—which was replaced by the North American Industry Classification System (NAICS) in the year-2000— is a very powerful means of defining uses. The system is a hierarchical as illustrated below using the NAICS codes.

- 5 Services
- 51 Information
- 511 Publishing Industries (except internet)
- 5111 Newspaper, Periodical, Book, and Directory Publishers
- 51111 Newspaper Publishers
- 51112 Periodical Publishers
- 51113 Book Publishers
- 51119 Other Publishers
- 511191 Greeting Card Publishers
- 511191 All Other Publishers
- 5112 Software Publishers
- 512 Motion Picture and Sound Recording Industries
- 52 Finance and Insurance

The use of NAICS permits the very precise use of a listing of over 25,000 definitions. One can select what ever level is needed from two to six digits. If a particular use does not fit one can say NAICS 51 except NAICS 512. There is often a catch all category at six digit level. A specific use in a length list here can also be excepted. It should also be noted that there are no detailed SIC or NAICS codes for different types of residential uses or housing types: there is a single code (NAICS-814) that pertains to “private households.” Where NAICS is inadequate as with residential uses, definitions without the NAICS may be used.

Section 7.5(d) of the current zoning ordinance relies on an assigned SIC code to track compliance of a specific site’s approved land use as part of the Development Review System (DRS) approval and enforcement processes. Because there is no breakdown of residential SIC codes, the strict application of this provision is ineffective for enforcing residential land use changes after a project has been approved.

7. **Misplaced Definitions.** Occasionally a code writer will unwittingly place a definition in the text body rather than the definitions section. Few misplaced

definitions were found in the Jefferson County Zoning and Land Development Ordinance, but one example can be found in Section 5.8(b)7—Standards for Toxic Matter, where the technical definition of “airborne toxic matter” is found in the third paragraph of that sub-subsection.

8. **Missing Definitions.** Often, the ordinance text will contain words or phrases that need a specialized definition to narrow its scope of meaning. For example, Section 5.8 of the Zoning Ordinance specifies “Public utility buildings” as a principal permitted use in the Residential/Light Industrial/Commercial District. Such a building could range from a small well or sewage lift station enclosure to a large power generating plant. Providing it, as well as other land uses, would provide a needed limitation.
9. **Definitions Containing Standards.** Often in the drafting process, code writers include narrowly defined terms that include an excessive number of standards or qualifications in order to meet the definition requirements. When this occurs, it is usually more appropriate to include the standards in the main body of the code text, not the definition. There are very few instances of this problem in the Jefferson County codes. The following example is a minor one found in the Salvage Yard Ordinance:

“**Salvage Yard:** Any place which is maintained, operated or used for the storing, keeping, buying, selling, or processing of salvage, or for the operation and maintenance of a motor vehicle graveyard, and the term shall also include garbage dumps and sanitary landfills. Any collection of ferrous or nonferrous materials together with one or more junked motor vehicles, or a collection of any salvage contained in an area more than one quarter acre in size, shall be considered a salvage yard.”

The one-quarter acre size minimum (which apparently applies only to the second sentence) constitutes an exemption for areas less than one-quarter acre. It would be better placed in an exemptions clause in the main text rather than burying it (no pun intended) in the definitions section.

2.3. Order of Articles and Sections

The sequential order in which material is presented is not the same in the zoning and subdivision ordinances, particularly relating to standards and administration. A user-friendly code should be designed to let the casual reader find the information they most often seek easily and quickly. The basic users have already been defined as lay citizens and business people. What information does this group most want to find? They want to know:

- How their land is zoned;
- What types of uses can be built on the land; and

- How many dwellings or square feet they can build on the land.

These are three critical factors that are linked. The realtor working for a client, business person, home buyer, or citizen will focus on these three issues first. While other factors are critical at some point, they are rarely the first concern. One wants to know how to change zoning only after finding out that it needs to be changed.

The organization of the Jefferson County Zoning and Land Development Ordinances could use improvement. As the text addressing the above three crucial zoning provisions begins in Article 5. It is preceded by the definitions, administration and enforcement, general provisions, home occupations, and wireless telecommunications facilities sections. Similarly, landscaping, street design, or other elements are critical only when a project is under design.

In the Subdivision Ordinance, the more critical parts of the code (submittal requirements, approval process, and standards) are preceded by “housekeeping-type” general provisions, definitions that could be just as easily positioned toward the end. A introduction that explains the organization into substantive and procedural elements is needed. There needs to be a clear divide between procedures and standards.

The recommended organization, shown in Table 1, is designed to put the first concern of the casual user (citizens or business people) as close as practical to the front of the code. The citizen with no zoning experience should be able to open the code and rapidly get to the information they need. The zoning map and districts, uses, and intensity of use standards are the most frequently needed information for the average users.

The definitions are contained in each of the existing codes near the front of each. This is not a logical placement. People do not sit and read a zoning ordinance, they try to get to the information they want. Thus, the proposed organization puts the primary content up front. One turns to definitions only when the reader does not understand what a word means; therefore, they are best located at the very rear of the code. Another aspect of definitions is the use definitions, which may be organized alphabetically or placed in a separate section that matches the table of permitted use. This latter approach is easier to use because it simplifies searching for the desired use and is recommended for the table of use and definitions to make material easy to find.

It is appropriate to mention here that future zoning and subdivision codes will be provided in both written and electronic format and will be available on the Internet. This will make the codes far more user friendly. For example, all defined words can be highlighted in the text so if the user is unsure of the meaning, he or she may click on the word to view the definition in a popup window.

3. CLARITY, POSITIONING, AND LANGUAGE

The clarity of material is presented is very important. The writing needs to be as simple as possible. More importantly, the material should be organized for ease of use. One common mistake is to mix elements. Codes have sections intended to explain the

purpose, regulate, and define. Too often they are mixed. Definitions, as earlier discussed, should consist of a defined term and not contain any standards. Other examples of positioning errors found in the County's Zoning and Land Development Code include:

The Zoning Certificate application submittal requirements, specified under Section 3.2 Zoning Administrator, should be located in one of the Article 7 procedures sections. Section 3.2c is a "general applicability" section that would be better placed in Article 1.

The cottage industry provisions found in Section 4A.3 contains a regulatory element regarding sign size and illumination.

Provisions for the creation, composition, and duties of the Board of Zoning Appeals are found in Section 7.8 of the Zoning and Land Development Code. This particular section was intended to contain only the approval procedure for a conditional use permit. The composition and functions of the various approving bodies should be presented in its own article.

The parking lot design requirements are found in Section 11.2 of the Subdivision Ordinance. They should be in the Zoning Ordinance. Other provisions currently in the Subdivision Code that are normally found in zoning regulations include manufactured housing park and campground regulations, hillside development, and other standards that apply to both single-parcel development projects and subdivision plats.

4. DOCUMENT FORMATTING

The current codes were originally written in the early days of computerized word processing and, while generally attractive and readable, incorporate only the most basic features. These include:

- Tab and column indentation
- Adjusted right-hand margins
- Underlining of section subheadings
- Page numbering

Readability could be enhanced with the following improvements:

- Bold article and section headings
- Possible use of an alternate type face for headings
- Additional information provided in page headers and footers
- Enhanced table formatting including table title, bold headings with shaded backgrounds, and gridlines.
- Reduced font size with possible use of italics for amendment citations

One good aspect of the current code is that sections are generally short and are broken into indented subsections and sub-subsections, a desired writing style. In general, most

of the text is clear, with only a little “legalese” writing in places. Sentences should also remain as short as possible.

4.1. Use of Tables

Tables, when properly applied, can significantly reduce the need for descriptive text. The current codes provide few tables; adding more would likely result in a significantly more readable document.

The principal permitted uses enumerated in Article 5 are listed, rather than displayed in tables. Lists, in general, are not user-friendly. Because there is a separate list for each zoning district, it is necessary to search several districts to find the desired use. The current code has only four zoning districts, so that a single table can easily display all the zoning districts and uses.

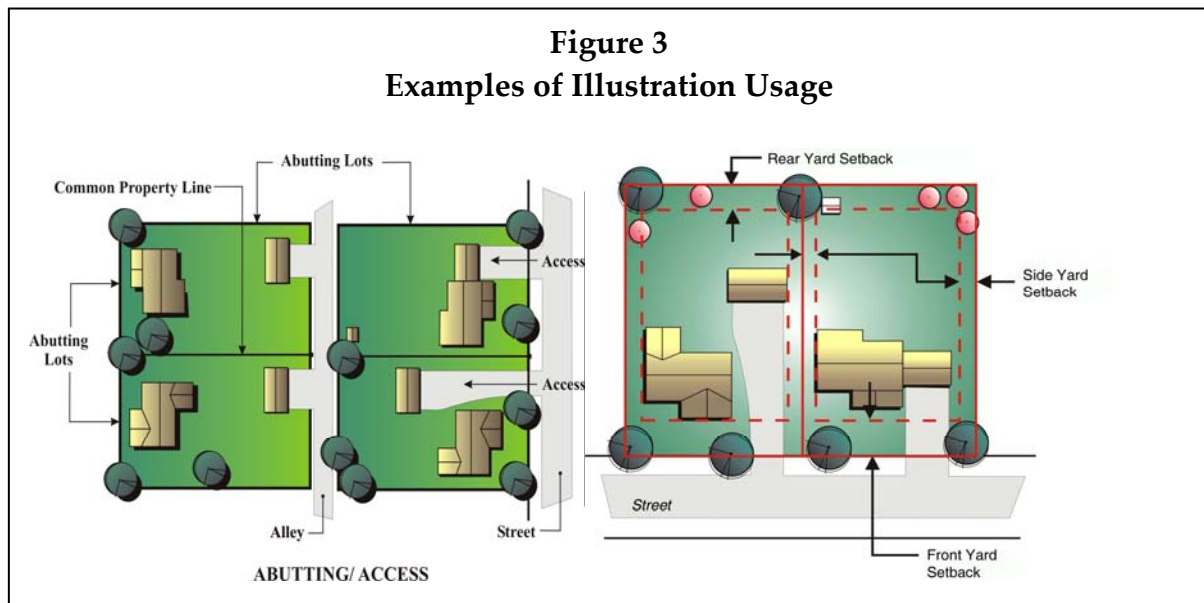
Tables have an additional advantage over lists. In lists there is a permitted use list and a special use list for each district. Tables have the advantage that a letter can be used to indicate whether a use is a permitted, special use, or prohibited use in the district. Again, this makes it easier for the reader to get the information they need quickly.

Another danger with listing permitted use is that over time the listed use in one district becomes inconsistent with a similar use in a second district. This fault often occurs when new districts are created or when a new use is added or changed within one or more existing districts. For instance, in the Zoning Ordinance, a “home occupation” is permitted in the Village District, while a “home business” (which is not defined) is permitted in the Rural District. Enumerating these uses in a table covering all districts helps to avoid this type of inconsistency.

4.2. Illustrations

The current codes have no graphics. Graphics are important to the modern zoning code and should be used to a maximum extent to provide a clear understanding of the concepts. This is true in the text and in the definitions, where concepts like setbacks and yards or words like abutting can be illustrated to make them easier to

understand.



4.3. Use of Appendices

There are some things that should not be in the body of a code; instead, they should be referenced as an appendix located at the end. An example of this is the exhaustive listing of elements (e.g., north arrow or bench mark list) to be included on a subdivision preliminary or final plat. Another example might be a landscape material species list for buffer areas. Locating these lists at in an appendix enhances the readability of the text without compromising legal requirements. Also, it is possible to allow administrative adjustments to an appendix by staff by designating staffs ability to alter such documents in the administrative section of the codes.

4.4. Commentary Inset Boxes

While it would be nice if all written material could be simple and non-technical, that is usually not possible in a highly technical field. Another technique that can be used to add clarity is to add explanatory information. It can be commentary or examples of how something is applied. Modern word processing allows the use of numerous fonts, so italics or font changes can highlight the material. Another tool is the text box, which can offer commentary that is explanatory, legislative intent, or examples of how something is calculated. It informs in a way that is not regulatory and separates educational or explanatory information from the actual text. If the reader needs the information they can read it; if not, they can skip it.

Commentary Inset Example: A text box may be used to provide commentary or an example of how something works. The box uses a border, fonts, color, or other techniques to distinguish it from the actual ordinance language.

5. TECHNICAL ASPECTS

There are a number of technical concepts fundamental to the Jefferson County codes that need to be refined or replaced. Other important concepts need to be added. Following is a discussion of these technical aspects.

5.1. Districts

The existing zoning ordinance has five zoning districts—residential, commercial/industrial, rural, and mixed. Although the 2004 Jefferson County, West Virginia, Comprehensive Plan spells out the land use categories within the context of the zoning districts used in the current ordinance, it would appear appropriate to recast these uses in the terms of both their occupancy/use classifications and their aesthetic “community character.” As described elsewhere in this report section, the existing districts contain overlap in types of uses permitted and are inadequate in regulating varying densities. This analysis is proposing a schema of eight districts, shown in Table 4, based on a scheme of community character groupings.

Commentary: There is some inconsistency in the naming of Jefferson County’s zoning districts in various parts of the zoning ordinance. For instance, in Section 5.1, the Rural District is titled “R-A Rural/Agricultural District,” while it is referred to as the “Rural District” in all other parts of the text and the Zoning Map.

Table 4 District Comparison	
Existing Code	Proposed Code
R-A—Rural-Agricultural	AG—Agriculture
	CS—Countryside
R-G—Residential-Growth	SE—Suburban Estate
	SR—Suburban Residential
R-L-C—Residential-Light Industrial-Commercial	U—Urban
	CG—Commercial, General
I-C—Industrial-Commercial	BPI—Business Park/Industrial
Village	NC—Neighborhood Conservation

Each of the recommended new districts is discussed below:

1. Rural Districts

- AG—Agricultural District.** This district is a use-based district intended to allow only agriculture to be the primary use of land and to restrict uses or activities that interfere with agriculture or where neighboring non-farm occupants would be impacted by the noise, dirt, or odors associated

with agricultural uses. This district is entirely rural in character. Agriculture is the primary use of the land to which residential is only an accessory to the primary use. Other business uses should be limited to those that are directly supportive of or similar to the primary agriculture use. Water supply and sanitary waste disposal are to be provided through on-site (typically wells and septic tanks) systems.

- b. **CS—Countryside District.** This district is a use-based district intended to permit agriculture to be the primary use of land over the short term, while allowing very low-intensity residential development in a manner that is consistent with the preservation of agriculture and allowance of animals. This district is intended to retain a rural character upon full development. The character is ensured by a combination of very low-density development or extreme development clustering with a high level of open space for higher intensities. Agriculture is the primary short-term use of the land. This is an ex-urban environment where residential uses may be allowed to supplant agriculture. The very high ratios of open space for various forms of development clustering are intended to allow agriculture or natural environments to occupy a majority of the land area. Non-residential uses should be consistent with the preservation of agriculture or natural areas. Water supply and sanitary waste disposal are to be provided on site.

Commentary: One of the applications of the Countryside district is to provide the appearance of an open space “green area” at the edges of an established city or town; it appears as a “freestanding” community rather than being blended in with the suburban landscape.

2. Suburban Districts.

- a. **SE—Suburban Estate District.** This district is a low-density residential district. It is intended to permit single-family residential uses on large lots or development clustering with high open space and low impervious surface ratios for increased intensities. The character of this district is rural residential in nature, which is ensured by a combination of low density or development clustering with high levels of open space for higher intensities. A high ratio of open space and low impervious surface ratio characterizes the built environment. Landscaping and design are intended to enhance the character of the development and preserve views of the landscape. This district is not serviced by sewer and is not planned

Commentary: It is proposed that manufactured home parks would be a Limited Use in the SR District, thereby requiring additional review in accordance with explicit standards provided in the zoning ordinance. Densities would be comparable to all other housing types in this district. Approval of a higher density might be considered if additional conditions are

for sewer service in the future. Some areas may have public water available. The development pattern is planned for full build-out.

- b. **SR--Suburban Residential.** This district would be the primary residential district in growth areas designated in the 2004 Comprehensive Plan. It is intended to permit a wide range of residential use and encourage a variety of housing types. This district is suburban in nature, which is characterized by a balance between the landscape and buildings with on-site landscaping and tree-lined streets that shelter the buildings. Open space and low impervious surface ratios characterize the built environment. Development clustering should be encouraged to ensure an adequate amount of open space will be available upon build-out to enhance neighborhood character and the lifestyle of residents. The SR--Suburban Residential district is intended to create residential neighborhoods, while permitting a range of housing types to meet all residential needs. Institutional and recreational uses that serve the neighborhoods are permitted, but they should be restricted in scale to preserve the residential safety of the neighborhood streets. Water supply and sanitary waste disposal are to be publicly provided by centralized systems. Even if designated as part of the "growth area" by the Comprehensive Plan, land areas without infrastructure should not be zoned Suburban Residential until adequate infrastructure is provided.

3. Urban and Auto-Urban Districts

- a. **U--Urban District.** This proposed district is predominantly residential with a traditional, "new urbanism" neighborhood character with narrower tree lined streets and smaller yards. Multi-family and non-residential uses may be permitted within the context of a master planned community development project, such as the Hunt Field project in Charles Town. Pedestrian activity is encouraged, and open space should be designed to be used for activity centers for the district. This district should be located either near major highway/transit corridor or possibly as an extension to areas zoned NC--Neighborhood Conservation having similar density. The administration of design standards will ensure the desired character.
- b. **GC--General Commercial District.** This district will be the primary commercial district for unincorporated parts of the County. It is intended to accommodate highway service uses and community or regional commercial, office, and service uses. This district has an auto-urban character, which is usually defined by large amounts of parking, often exceeding the building coverage. Landscape buffers and landscaped parking areas should be required to soften the impact of such commercial uses. Architectural and other design controls are intended to encourage and require more attractive buildings and avoid visual degradation

caused by very large buildings with large blank walls and no building articulation or design elements. Water and sewer are publicly provided. Even when designated as a “growth area” by the Comprehensive Plan, areas without infrastructure should not be zoned GC—General Commercial until adequate infrastructure is provided.

- c. **BPI—Business Park/Industrial District.** This district is intended as the primary business and industrial district for the County. It reflects a character of an employment area where a mix of industrial, office, warehousing, wholesaling, and other uses are found in a campus-like setting. This district is appropriate in selected areas of the County where compatibility with adjacent uses or where achieving enhanced aesthetics and appearance are important. As determined by the County, this district would be appropriate within designated industrial parks that are situated within the “growth areas” shown in the Comprehensive Plan. Under special conditions, this district could accommodate large, freestanding heavy industrial installations. The Business Park/Industrial District has an auto-urban character, which is generally characterized by large areas of parking and larger buildings. Landscape buffers, landscaped parking areas, and increased landscape surface areas are required to soften the impact of these uses. Treatments around the perimeter of the development, as well as architectural and design controls of perimeter buildings, are intended to encourage and require a more attractive business park environment. Perimeter landscape treatments allow an improved buffering of street frontage, with interior areas that can support businesses that are not visible to the general public. Water and sewer are publicly provided. Even when shown as “growth areas” by the Comprehensive Plan, areas without infrastructure should not be zoned Business Park until adequate infrastructure is provided.

4. Special Districts

- a. **NC—Neighborhood Conservation District.** This district is intended to preserve the character of the existing residential neighborhoods that were developed before zoning was adopted in Jefferson County, under the County’s existing zoning categories that would no longer be applicable under the proposed code, or of platted areas that became nonconforming (such as the Shannondale development area) when zoning was first adopted. The use of this district is intended to ensure that these areas are not required to seek variances to

Commentary: It may be appropriate to split the NC District into sub-districts to reflect the differing types of areas to conserve—historic villages, mountainside development, and other developed enclaves. For instance, “NC-20” and “NC-10” would designate a 20,000 and 10,000 sq. ft. minimum lot sizes, respectively.

improve housing that was conforming to the regulations in place when the area was platted. By retaining existing lot size and dimensional character of the areas as platted and built-upon, additional nonconformities are avoided. It is also intended to address small unincorporated villages that were settled and grew prior to zoning (e.g., Summit Point or Rippon). This district may provide for infill lots, but is not to be used to zone any significant areas of vacant land. Water and sewer should be publicly provided.

5.2. Permitted, Limited, Conditional, and Accessory Uses

Employing the three general use-status categories provides an effective way to determine type and depth of special reviews needed to approve a development project or building occupancy. They are as follows:

1. **Permitted Uses.** The land use or occupancy is permitted by-right. An applicant is administratively granted a building and/or occupancy permit as soon as it has been determined that the intended use and building plans conform to the requirements of the ordinance.
2. **Limited Uses.** Limited uses are permitted upon review of a site plan. However, there are standards that may disallow limited uses on certain properties or locations. In other cases, there are specific site design or locational standards, which are explicitly contained in the code, that must be met. Approval of a limited use is a ministerial function that does not require a formal public hearing, appeal, or affirmation by the elected body. Many jurisdictions delegate the approval of certain specific (or, sometimes, all) limited uses to the zoning administrator.
3. **Conditional Uses.** Approval of conditional uses requires individual site plan review and a public hearing to accept public comment. In addition to the explicit standards contained in the ordinance text for a given use, a zoning board may impose additional conditions for the occupancy, intensity, layout, or other factors in order to meet the requirements of the Comprehensive Plan.
4. **Accessory Uses.** Because these uses (e.g., a detached garage, shed, or commercial parking lot) are subordinate to a principal use, they are normally excluded from a use table listing. Exceptions might include certain in-home uses, such as day care, that might be included in a use table listing to make it easier to find.
5. The existing Jefferson County Zoning and Land Development Ordinance incorporates only Permitted and Conditional uses.

5.3. Use Tables

As was mentioned previously, tables are much better than lists. Use lists can extend to multiple pages and require much page flipping to determine the appropriate district(s) for a specific use. Many of the use problems and inconsistencies are related to the fact

that the lists are often modified separately. Table 5 presents an approximation (not all consolidations are exact) of the existing zoning ordinance's uses in tabular form.

Table 5
Use Table Approximation, Existing Zoning Ordinance*

Land Uses	Existing Districts				
	R-G Residential- Growth	I-C Industrial- Commercial	R-A Rural- Agricultural	R-L-C Residential- Light Industrial- Commercial	Village
Agriculture					
Animal feeding			C		
Animal waste storage			C		
Equestrian riding/training facilities			P		
Farm market			C		
Forestry			P		
Horse breeding and/or boarding			P		
Private riding stable			P		
Agriculture (all remaining)			P		
Residential					
Single family detached residence	P		P	P	P
Mobile home			P		
Duplex	P		C	P	P
Townhouse	P			P	
Multi-family dwelling unit	P			P	
Mobile home park	L			P	
Group residential facility	P		P	P	
Nursing/retirement home	P			P	
Public and Institutional					
Adult educational facility	P				
Child care center	P			P	P
Church or place of worship	P			P	P
Fire/rescue facility, public			P		P
Fish, game or poultry hatchery			P		
Hospital	P				
Library, museum or similar institution			P		P
Medical/dental/optical office, small					P
Public utility building	P			P	
Publicly owned facility (all)			P	P	
School	P				
Commercial					
Commercial (all except adult business)		P			
Adult business		C			
Antique shop					C
Barber/beauty shop					C
Bed and breakfast lodging			C		C
Country Inn					C
Dry cleaner					C

Land Uses	Existing Districts				
	R-G Residential- Growth	I-C Industrial- Commercial	R-A Rural- Agricultural	R-L-C Residential- Light Industrial- Commercial	Village
Commercial (continued)					
Financial Institution or ATM					C
Florist					C
Grocery store					C
Horticultural nurseries and greenhouse			P		
Non-Profit organization business				P	
Restaurant, carry-out					C
Restaurant, sit-down					C
Industrial					
Heavy industrial (all remaining)		P			
Bituminous concrete plant		C			
Chemicals manufacturing		C			
Commercial sawmill		C			
Explosives manufacture and storage		C			
Foundry and/or casting plant		C			
Mineral extraction		C			
Mineral processing		C			
Petroleum Refinery		C			
Salvage yard		C			
Waste processing facility		C			
Special/Temporary/Accessory					
Accessory caretaker dwelling		P			
Cottage industry					C
Home occupation (home business)			C		P
Home-based care facility			C		
Model home sales office	C		C	C	
Wireless communication facility			C		
Key: P = Permitted Use, L = Limited Use (none), C = Conditional Use, (Blank) = Prohibited Use *Note: Nearly all provisions restricting land uses can be overridden in the existing code through the Development Review System (DRS) process.					

Table 6
Proposed Use Table

Land Uses	Proposed Districts								
	AG	CS	SE	SR	U	CG	BPI	NC	
Agricultural Uses									
Agriculture	P	P							
Farmstead	P	P							
Kennels and veterinary clinics	L	L							
Commercial stables	P	L							
Residential Uses									
Single-family, detached	P	P	P	P	P			P	
Single-family cluster	P	P	P	P					
Planned	P	P	P	P	P				
Two-family			P	P					
Single-family, attached			P	P					
Manufactured home park				P					
Small single-family	P	P	Use Table to be filled in after further discussions						
Group home	P	P	P	P	P			P	
Home Uses									
Day care, family	L	L	L	L	L			L	
Home occupation	L	L	L	L	L			L	
Home business	L	L			L			L	
Cottage industry	L	L						L	
Institutional Uses									
Places of assembly		L	L	L	L	L	L	L	
Institutional, residential		L	L	L	L			L	
Protective care	C						L		
Public service	C	L	L	L	L	L	L	L	
Utilities, neighborhood	L	L	L	L	L	L	L	L	
Hospitals					L	L	L	L	
Commercial Uses									
Adult uses						L			
Agricultural support and other rural businesses	C								
Bed and breakfast	L	L	L	L	L	L	L	L	
Commercial lodging						P			
Retail Commercial					C	P		C	
Services					C	P		C	
Drive-in facility						P			
Heavy retail and service						P	P		
Light automobile service						P			
Mixed use					C	P			
Restaurants					C	P	P		
Office					C	P	P		

Land Uses	Proposed Districts							
	AG	CS	SE	SR	U	CG	BPI	NC
Commercial Uses (continued)								
Shopping center					C	P		
Vehicular sales, rental, and service						P		
Recreation and Amusement Uses								
Campground and RV parks	C	L						
Commercial amusement, indoor						P		
Commercial amusement, outdoor	C					L		
Recreation, indoor						P		
Recreation, outdoor	C	L	L	L	L	L		L
Industrial Uses								
Extraction							C	
Heavy industry							C	
Light industry							Use Table to be filled in after further discussions	
Recycling or storage							C	
Disposal							C	
Utilities, community	P	P	P	P	P	P	P	P
Utilities, regional	C					C	C	
Special Uses								
Airports	C							
Commercial communications towers	C	L	L	L	L	L	L	L
Temporary Uses								
Commercial temporary outdoor sales						L		
Concrete/asphalt batch plant							L	
Contractor's office							L	
Farm stand	L	L						
Sidewalk sales and farmer's markets	P				C	C		
Garage sales	L	L	L	L	L			L
Model homes/sale office		P	P	P	P			
Public interest and special events	C	L	L	L	L	L	L	L
Temporary miscellaneous sales	L	L						
Key: P = Permitted Use, L = Limited Use, C = Conditional Use, (Blank) = Prohibited Use								

5.4. Specific Uses

There are some uses specific that have proven to be issues or problems in many communities. Preparation of the future code will address issues pertaining to the following uses or use categories:

1. **Adult Uses.** These have troubled many communities. Is this something the County wants revisit in the new code? There are two schools of thought on adult uses—one is to control them with zoning; the other is to control them through licensing, if permitted by Statute. The latter approach has much to recommend. In zoning hearings, the owner's criminal record or performance as a manager are

not relevant pieces of information. On the other hand, licensing for liquor sales or adult uses routinely addresses these issues. Since the concern for criminal behavior is one of the purposes for controlling adult uses, the licensing seems to be a superior approach because issues that zoning is prohibited from addressing can be dealt with in licensing, and “zoning type” restrictions can be placed within a licensing ordinance. The County attorney will need to evaluate this possibility. If, on the other hand, the regulation of adult uses is to remain in the zoning ordinance, it may be appropriate to simply move the existing provisions into the new code with few structural revisions.

2. **Agricultural Uses.** Members of the Citizens Advisory Committee created for the purpose of guiding and reviewing this zoning project expressed a strong desire to broaden the types of activities that would be permitted in the current Rural district. Such uses to consider would include bed and breakfast lodging, small wineries, agricultural product sales, group quarters (dormitories) for farm workers, and similar non-farming uses. These types of uses, along with any appropriate limitation standards, will be addressed during code drafting. To control these uses, it is recommended that a farmstead be defined as a owner-operator home and land with a minimum acreage. These secondary uses can then be limited uses only in conjunction with the farmstead, so that small, nonfarm residential properties cannot seek these uses.
3. **Group Homes.** Group homes are uses protected by federal statutes with a substantial base of supporting litigation. As a result, this use must be permitted in any district where single-family homes are permitted. Group homes cannot be ruled out by a definition of family, so it is recommended that group homes be a specific use.
4. **Protective Uses.** The location of correctional facilities is another controversial issue facing many communities. The current Jefferson County Zoning and Land Development Ordinance treats jails and prisons as a special case within the general provisions of Article 4 and limits their locations to the Industrial-Commercial district. It further subjects them to the LESA provision contained in Article 6 and the site location standards that are equivalent to an adult use (Section 5.7(l)). It is recommended that protective uses become its own land use classification and be treated as either a limited or conditional use within the recommended BPI—Business Park/Industrial district. It may also be appropriate to consider locating these facilities in the proposed AG—Agricultural district, again, as a limited or conditional use.
5. **Temporary Uses.** The current code contains few provisions regulating temporary uses such as asphalt plants used during construction, model home sales offices, carnivals, “corn mazes,” garage sales, outdoor seasonal parking lot sales, large outdoor public events, and the like. Where they are addressed in the current ordinance, most notably asphalt/concrete plants and farm stands, they are treated as if they were permanent. Because these activities should normally be

approved summarily through an expedited permitting process, it is appropriate to place them in their own use category where they can be handled differently.

6. **Wireless Telecommunication Facilities.** Placement of cellular telephone towers and similar equipment was a major issue of the 1990s but has since subsided with the attainment of service area coverage. Zoning's ability to control or restrict wireless facilities has become a First Amendment Constitutional issue, which has resulted in severe limitations of zoning's governance on cellular towers. It appears that Article 4B of the County's existing zoning ordinance, adopted in 1998, has taken these Constitutional issues into consideration and provides appropriate locational standards, siting requirements, and application review procedures. These provisions will be merged into the new code with some minor, mostly structural changes.

Commentary: Under West Virginia Statutes, Chapter 8A, Sec 8A-7-3, "essential utilities and equipment" are to be a permitted use in any zoning district. The definition of "essential utilities and equipment" in Chapter 8-A is very broad—even including waste treatment plants.

5.5. Agricultural Preservation and Growth Management

The 1979 Jefferson County zoning ordinance created a "R-A Rural/Agricultural" district, which covers approximately 80% of the County's unincorporated land area. The intent of the district is to preserve farmland and the rural character of the area. There is also several significant provisions that allow the construction of single-family dwellings on 40,000 sq. ft. lots, low density subdivisions, and cluster subdivisions. Even when administered correctly, these provisions have limitations in preventing non-farm residential communities from being developed in rural areas. Further, a significant loophole is provided through the provision that allows *any* use that is not listed as a permitted use in *any* district as a conditional use (other than those expressly prohibited in Section 4.4) through the Development Review System (DRS), which incorporates a modified version of the Land Evaluation and Site Assessment (LESA) scoring system.

LESA is a numeric rating system created by the USDA Natural Resources Conservation Service (NRCS—formerly the Soil Conservation Service) in the 1980s to evaluate a land parcel's relative agricultural importance. As originally designed by its creators, the scoring system was based on two criteria groups:

1. The land evaluation (LE) component of a LESA system measures soil quality. It is usually based on land capability classes, important farmland classes, soil productivity ratings and/or soil potential ratings.
2. The site assessment (SA) component was intended to evaluate other factors that contribute to the site's *agricultural* importance, such as parcel size and on-farm investments. SA factors may also consider development pressure and public amenities like wildlife habitat or scenic views.

The LESA systems assign points and a relative weight to each of the LE and SA factors. The sum of the weighted ratings is the LESA score; the higher the LESA score, the more significant the site's appropriateness for agriculture. States and localities, particularly those in the highly productive Corn Belt region of the U.S., often adapted the federal LESA system to meet their needs. In Jefferson County, the LE component was adapted to the agricultural productivity of soils, as mapped in the Jefferson County Soil Survey. The SA "amenities" component was substantially modified to consider a subject site's proximity to urban infrastructure, highway access, and public services.

Jefferson County's DRS/LESA process, while exhaustive, still provides a means to circumvent many of the use regulatory provisions of the current zoning ordinance. While there have been no statistics compiled on the number of projects or cumulative acreage of DRS approvals that have trumped the land use regulations contained in Article 5, there is enough anecdotal evidence that this process has eroded the effectiveness of zoning as a means of preserving agriculture or curbing unplanned suburban growth in Jefferson County.

There are further reasons to consider abandoning the LESA scoring system.

1. LESA was originally created as a means of designating highly productive cropland that can be preserved from productive cropland whose location in metropolitan areas makes their loss inevitable. As such it was better suited to creating boundaries of agricultural areas than for a case by case evaluation of individual sites.
2. The application of LESA results in scattered development almost like institutionalized spot zoning. These scattered residential developments alter the LESA scores of adjoining properties and worse yet they increase rural land values and create the potential for conflict between residential uses and agriculture uses.
3. It is possible to subvert the LESA scoring process by positioning development on a less agriculturally productive piece of land. Theoretically, the end result of this practice when projected forward would be a shotgun land use pattern that resembles the soils map.

Most importantly, LESA is a very short-range approach to protection. With each approval, the LESA score of adjoining properties is lowered, thus overtime the approvals will destroy the value of an area for agriculture. Does the commentary above suggest an anti-growth posture in this analysis? Certainly not. It is the overall intention that the new zoning ordinance acts as a tool for channeling growth to:

1. The locations designated as "growth areas" in the County's Comprehensive Plan (page 75) ,
4. Within the existing or reasonably planned municipal boundaries of incorporated cities,
5. At the edges of smaller established cities and villages, and

6. For curbing non-agricultural development in areas that are designated to remain rural.

The Development Review System (DRS) and its accompanying Compatibility Assessment Analysis—absent LESA—provide a valid method for determining the suitability of amendments to the Comprehensive Plan, amendments to the zoning map (“rezonings”), and approval/denial of certain conditional uses in accordance with the standards set forth in the zoning ordinance text. Adjustments to the DRS will be in order, the main one being its consolidation with the Community Impact Statement (CIS)—most of which will be moved from the current Jefferson County Subdivision Ordinance over to the proposed zoning ordinance.

5.6. Growth Areas

The “official” growth areas for the unincorporated parts of Jefferson County are shown on the map on page 75 of the adopted Comprehensive Plan. The larger growth area encompasses large expanses of land surrounding Charles Town and Ranson, along the U.S. Highway 340 corridor between Charlestown and Harpers Ferry/Bolivar. A second growth area includes lands north and west of Shepherdstown and the status of this area is qualified by the need to integrate Shepherdstown’s ongoing local planning efforts with the County plan.

In the meantime, as of this writing, both Ranson and Charles Town are in various stages of updating their comprehensive plans. They are revising their declared growth areas, which extensively overlap the growth area shown in the County’s Comprehensive Plan. These growth areas represent the cities’ long-term posture toward future annexations. While this analysis takes no stand regarding the advisability of the two cities’ growth areas, the following general observations are made:

- It is appropriate for a municipality to annex property as it grows, and it is equally appropriate that a city plans for this eventual annexation based on anticipated population growth and planned extensions of streets, urban infrastructure, parks, and public services. Hemming a city in only promotes further leapfrog development.
- Land areas that are developed at the edges and within reasonable proximity to existing municipalities are best served by those municipalities and should be eventually annexed. Because of this, new development should conform to the standards contained in that city’s zoning and subdivision regulations.
- Many states recognize this need for providing orderly municipal growth in transitional areas by including statutory provisions for municipal extraterritorial subdivision and/or zoning jurisdiction. This allows cities to apply their development standards and approval procedures to areas within a specified distance (usually a one- to three-mile radius) of a city’s borders. *West Virginia has not adopted any provision for extraterritorial jurisdiction.*

Thus, the growth area boundaries exhibited by Charles Town and Ranson appear to act only as public policy statements regarding the respective municipalities' posture toward landowner/developer requests for annexation.

Ideally the County, Charles Town, and Ranson should collaborate to forge a set of long-range boundary agreements that are based on realistic growth projections, practical plans for street and utility extensions, and anticipated public service expansions. This joint boundary agreement should then be reflected in each jurisdiction's comprehensive plan, land development standards, and development approval procedures and policies.

Until this occurs, it appears necessary for the County to act unilaterally (but nevertheless understanding to the needs of the municipalities) in defining its zoning and subdivision regulation requirements for all of the County's unincorporated growth areas.

5.7. Development Densities, Yard Requirements, and Height Restrictions

Densities, yard, and height requirements for the Residential Growth (R-G) District are shown in Table 7, which is derived from the table shown in Section 5.4 of the current Zoning Ordinance. (This table, along with much of this discussion, also pertains to the density provisions of the Rural District, which applies this same table when a development meets the requirements of the Development Review System/LESA provisions)

In this district, single family residential densities are ultimately controlled by the minimum lot area (ADU) requirement, which is determined by the availability of public water and sewer service. Since it is the intent of the R-G district to accommodate development served by public/central sewer and/or water, the effective control on residential density is the 10,000 sq. ft. minimum lot size—the equivalent net density of 4.356 dwelling units per acre. Gross densities will be somewhat lower when taking required streets into consideration. Required yard and maximum building height requirements are appropriate for their respective minimum lot areas.

The main observation here is that single-family residential densities in the R-G District are determined by the availability of sewer and water. Where both sewer and water are available, required densities appear in conformity with the intent of this district and the Comprehensive Plan. Where utilities are not available, the 20,000 and 40,000 sq. ft. minimum lot area requirements should be higher. Because they're so low, the determination of suitability for accommodating a dwelling is most likely to be determined by succeeding to meet State well and on-site disposal requirements. These are found in West Virginia Title 64, requirements for "Individual and On-Site Sewage Systems" and Chapter 16-1, titled "Water Well Design Standards." Both are administered by the County Health Department. Health Department representatives participating in this analysis process indicated that 40,000 sq. ft. lots have substantial difficulties accommodating septic tanks (space for two drainage fields is required) and

Table 7
Residential Densities in the Existing Residential-Growth District

Development Type	Area per Dwelling Unit (ADU)**	Minimum Lot Area (MLA)	Required Yards	Maximum Building Height*
Single family detached dwelling				
Public/Central water and sewer	10,000 sq. ft.	6,000 sq. ft.	25 ft. front	40 ft.
Public/Central water or sewer	20,000 sq. ft.		12 ft. side	
No Public/Central water or sewer	40,000 sq. ft.		20 ft. rear	
Duplex				
Public/Central water and sewer	7,500 sq. ft.	3,200 sq. ft.	25 ft. front	40 ft.
Public/Central water or sewer	10,000 sq. ft.		25 ft. side 30 ft. rear	
Townhouse				
Public/Central water and sewer	3,500 sq. ft.	1,400 sq. ft.	25 ft. front 12 ft. side 20 ft. rear	40 ft.
Multi-family dwelling				
Public/Central water and sewer	2,000 sq. ft.	20,000 sq. ft.	25 ft. front 12 ft. side 30 ft. rear	40 ft.
Condominium				
		2,000 per Unit (20,000 sq. ft. min)	25 ft. front 12 ft. side 30 ft. rear	40 ft.
* Exterior dimension. Subject to excedptions listed in Section 9.2				
** The balance square footage between the ADU and the MLA shall not include land set aside in a Sensitive Natural Area, Buffer to a Sensitive Natural Area, land qualifying as Hillside development or a 100 Year Flood Plain				
Detached accessory structures under 144 square feet in size - 6' setback.				

that even an approved septic system presents a potential threat to ground water in the karst areas.

Another issue with the 40,000 minimum lot area required for unserved areas in the R-G District is that the possible proliferation of one-acre lots in these areas is inefficient, preemptive to later development with utilities, and not in keeping with the intent statement for the district (Section 5.4, first paragraph). The minimum ADU requirements for the R-G District should be increased to at least five or ten acres—large enough to prevent unsewered residential development from occurring. The 20,000 sq. ft. minimum size requirement for lots having either public sewer or public water service conflicts represents an even worst scenario and should be dropped. Establishing a functioning septic tank drainage system on a half-acre lot, while technically in compliance with Statute, is even more difficult and dangerous.

5.8. Screening, Buffering, and Landscaping.

The County recognizes the potential conflict that can occur between residential and non-residential uses and has provided perimeter buffering requirements in Section 4.11. Five alternative wall, fence, berm, or landscaping buffer screening options are provided in the code as standard design details M-52, M-53 and M-54. While the use of these specifications will result in effective buffering solutions, the design schemes provided in the standards appear overly rigid and symmetrical. Designers should be allowed flexibility in order to create more natural looking buffers that will better blend-in with the overall landscape.

A system of buffering that provides broader choices and opportunities for creating more natural looking bufferyards will be recommended. This new buffering approach will rely on formulas and performance standards based on bufferyard opacity—the degree to which one can see through a buffer. For example, buffers between industrial and residential areas will require very high opacities (100% represents a solid wall or thick vegetative screen) while lower percentage opacities would be required to separate uses that are more compatible with each other.

Other improvements to the buffering requirements include:

- Buffering requirements should be extended to the street side (front yard) of all non-residential and multi-family residential developments.
- Highway buffering should be required for residential subdivisions and developments along major highways, where their lots front interior streets.
- Specific standards should be provided for parking lot and driveway plantings, as required in Section 4.11(h).
- All landscaping and buffering standards should be contained in single part of the zoning ordinance. The industrial buffering standards for current ordinance are located in Section 5.8(b)10, while the remaining landscaping and buffering standards are contained in Section 4.11.

5.9. Parking and Loading

The County's parking requirements are specified for each of series of specific occupancy types in Article 11 of the Zoning and Land Development Ordinance. The standards are based on different factors used to gauge the intensity of activities, *e.g.*, 1 space per 400 sq. ft. of floor space. Other factors are based on the number of employees or the seating capacity of the occupancy.

The standards generally appear to be adequate, and only minor revisions are expected. These would include the following:

1. The uses and occupancies listed will be modified to fit with the same uses enumerated in the Use Table of the proposed ordinance.

2. The multifamily parking regulations contained in Sections 8.3 and 9.3 of the Subdivision regulations will be moved over to the new zoning ordinance.

Additional provisions need to be included in the new zoning ordinance for parking space sizes and parking lot aisle configurations. These would supplement the end island configurations specifications presented in R-44 of the County's "List of Standard Details."

Loading dock and maneuvering space provisions need to be added as requirements for commercial uses.

5.10. Subdivision Design Standards

The subdivision design standards provided in Section 8.2 of the Subdivision Regulations, themselves, only need minor adjustments. Illustrations and references to the County's "List of Standard Details" will improve the readability of this highly technical part of the ordinance.

Standards for block lengths, and street intersection radii need to be added to the R-series of drawings in the County's "List of Standard Details." These, along with additional subdivision street cross section diagrams will be provided. will also be provided.

5.11. Approval Processes

Each of the review and approval processes for the various application types will be carefully examined and rewritten in accordance with the West Virginia 8A Statutes. The use graphical flow charts may be appropriate in clarifying the procedures. Also, a table (example on Figure 4) that depicts the appropriate decision-making roles of the staff, boards, and County Commission will also be provided

In defining the approval processes, it is important to distinguish policies, procedures, and actions that are appropriate to the context of comprehensive plan approval/update versus the regulations themselves. Remembering that one of the fundamental purposes of zoning and subdivision regulations is to implement the comprehensive plan, many of the basic land use objectives and policy statements, along with a definitive future land use map, belong in the comprehensive plan document. A smooth development review and approval (or denial) process starts with clearly written plan.

It appears that some of the submittal requirements and approval procedures found in the current Subdivision Ordinance were originally drafted prior to the adoption of zoning and attempt to act in a zoning capacity in addition to regulating the plat approval process. Since the current Zoning Ordinance was adopted, these provisions and practices have become superfluous and, at times, might even act in cross-purpose.



Figure 4
Procedural Responsibilities Matrix Example

Table 13.201 Procedural Responsibilities				
Type of Action	County Commissioners	Planning Commission	Board of Appeals	Staff
Discretionary				
Zoning Text Amendment	HD	HR	-	R
Zoning Map Amendment	HD	HR	-	R
Special Exception	-	-	HD	R
Conditional Uses	D	HR	-	R
Design Review	-	-	-	-
Variance	-	-	HD	R
Ministerial				
Plat Review	D	HR	-	R
Land Development Review	D	HR	-	R
Variation - Plat/Land Development	D	HR	-	R
Administrative				
Limited Use	-	-	A	D
Zoning Certificate	-	-	A	D
Occupancy Permit	-	-	A	D
Sign Permit	-	-	A	D
Flood Plain Development Permit	-	-	A	D
Appeals				
Interpretation	-	-	A	-
Appeal	-	-	HD	R

R = The body makes recommendations to the decision-makers.
H = The body must hold a public hearing.
D = The body makes the final decision.

Provisions, such as the Community Impact Statement (CIS), need to be transferred over to either the new zoning ordinance or to the comprehensive plan update/adoption process.

Also, the recent updates to the West Virginia enabling statutes now provide for the establishment of a "board of subdivision and land development appeals." Further discussion is needed to determine the County's preferences of establishing such a board (or combining it with the Zoning Board of Appeals) and determining its makeup and operating procedures.

6. COMPREHENSIVE PLANNING ISSUES

There are five major issues that the comprehensive plan and interviews in the County have identified as priority issues; agricultural preservation (discussed earlier), water quality and natural resource protection, affordable housing, growth management, and transferable development rights (TDR). All of these are complex issues that have proven difficult for other counties to address. In fact many counties and cities have not succeeded in developing a regulatory system that achieves the desired goals. Three of

them involve two distinct views of the land as either a resource or as a commodity. The dual views of the land make agricultural preservation, protection of other resources, and growth management difficult. Affordable housing has represented a difficult planning issue across the nation with special places, resort areas and scenic areas leading the crisis forcing the working force in the community into long commutes and poor quality housing.

The conflict between the resource and commodity view of the land is obvious. The resource view suggests total protection of the resource and the commodity view values land for development purposes.

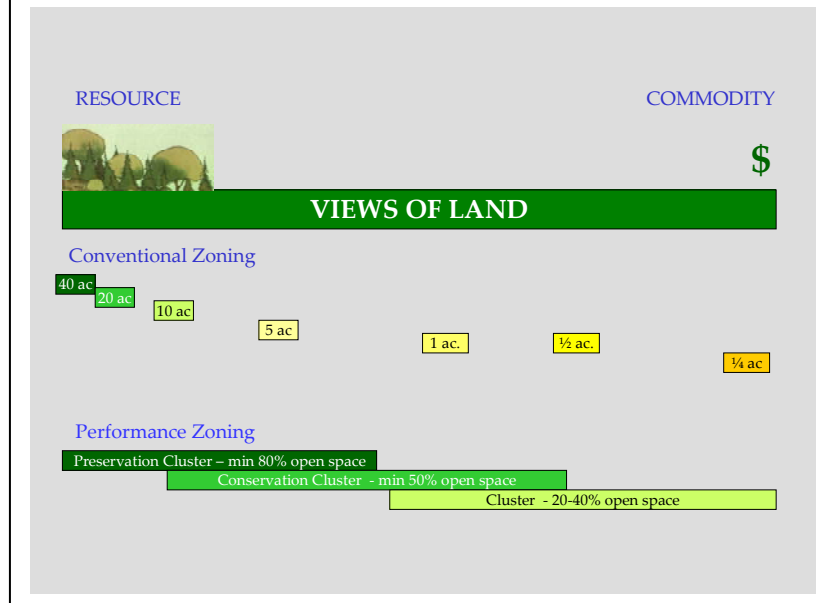
Different zoning has different impacts on both the commodity and resource values. Figure 5 illustrates this. Some forms of zoning protect a resource does so by reducing the development potential to the point that there is no market. Others do so by leaving the land available for the use of the resource as in farming, or protection of a natural resource. Protection of the resource leaves the land with a value for that resource which for farming is quite low. Various form of development may be able to protect the resource, but in doing so all

result in a reduction of development value. This conflict can be within the landowner who will state being in favor of protection, but also wants a return on the investment of holding the land. Thus, the various zoning alternatives must be evaluated in term of their effectiveness in protection and their impact on the land value.

The affordable housing issues are complex, with market, income, and other factors having a significant impact on effectiveness. The problem simply put is that a significant portion of the people who need housing cannot afford decent housing. The housing industry cannot make decent units that can be afforded. Housing costs have dramatically increased in recent years and a whole group of essential workers, school teachers, police, government employees, service industry workers do not earn a wage to afford housing in Jefferson County. The affordable housing problem has been a concern for decades but is very difficult to address.

While there are some non-regulatory approaches that can be used to address these issues, they are woefully inadequate to solve the problem so government has turned to regulations as part of the solution. In the following sections the problems will be defined

Figure 5
Views of Land



and alternative solutions evaluated. Recommendations have been made for each, but it is up to the citizens and officials of Jefferson County to make a decision as to the best approach for Jefferson County.

6.1. Competition between Agriculture and Development

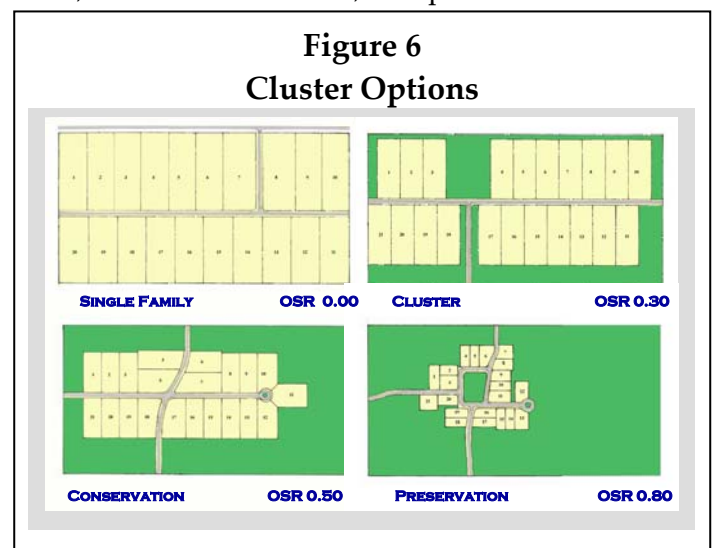
Agriculture is a basic industry and relies on good soils to be productive. It is land intensive, with low value in terms of dollars per acre compared to other land uses. The value of agricultural land is thus modest because it is related to the income per acre of a crop. As growth moves into rural areas, the value of land increases for its use for residential or other purposes. In Jefferson County the development value of land is far in excess of a farmer can pay. In addition there is a national and local trend for increasing farm size and fewer farmers. A significant number of the farms in Jefferson County are unable to sustain themselves on the value of the farm product but require additional sources of income. In many cases smaller farms have been in the family for generations and the families are attached to the land. The county wants to retain a healthy farm economy, to do this zoning must be considered a primary tool.

The obvious zoning strategy is to develop a zoning that eliminates the competition from residential development. This effort brings out the conflict between the commodity value and resource value because the public benefit in protection is clear, the question is who pays the cost of protecting the agriculture and how much? It is essential that this be addressed while there is an active farm community that wishes to continue farming. In this section we will look at two very different zoning approaches and evaluate several options in each.

1. **Conventional Zoning.** Conventional, Euclidian, or cookie-cutter zoning is based on a lot having a minimum area and minimum width. The entire property is divided into lots and streets under this system. The only effective way to preserve agriculture under this approach is to increase the lot size to the point where there is no market for residential lots of this size.
2. **Large Lot.** This is a lot ranging from 1 to 10 acres and relies on septic tanks for sewerage disposal. In most counties that have zoning, the district called agricultural is typically in this range. The fact is that this zoning cannot save farm land. As the community grows farmland is lost. If this is the best that zoning can do the goal will not be achieved. This type of zoning makes provides maximum land value to the land owner. There is a strong market demand for this type of housing.
3. **Very Large Lot.** The first recommendations for agricultural zoning--suggested lots of around 20 acres being sufficient to eliminate residential demand. The range of lot sizes is 15 to 25 acres. This category is regularly developed. The current base zoning in the Rural Area is one house per 15 acres and this does lower property values when compared to the large lot zoning. At best, this strategy can now be said to retard but not stop the loss of farmland. Land this

size is not capable of being a farm, although the term “farmette” is often used to describe this zoning. While some landowner may raise animals and some may grow crops, it is a hobby. The agricultural industry is displaced when this type of zoning is used. At best it may slow the rate of development, because the market is smaller for these larger lots. Caution is needed because the land per dwelling unit is larger the slowing may be illusory.

4. **Extremely Large Lot.** The lower end of this category is a 30-35 acre lot. In the Midwest, 40 acre zoning is very common and the state of Wisconsin mandates 40 acre zoning for agriculture that qualifies for tax benefits. This size lot is still beyond the residential market in most areas, but in some resort area there is a market for this that can out-compete farmers’ ability to buy land. Even lower density zoning ranges from 60 to 320 acres per dwelling unit have been used in agricultural districts across the nation. At those levels there is no incentive to subdivide other than to transfer farm land to other farm families as farmers retire and leave the industry. This zoning has no development value and thus succeeds in deflecting development. At the lower end of the size spectrum, the risk is that the market will catch up and farms will begin to be broken up.
5. **Cluster and Planned.** Cluster development involves having open space in residential development in addition to lots and roads. Figure 6 illustrates four development forms, conventional, cluster, conservation cluster, and preservation cluster. The three different types of cluster development have different values for the preservation of farms. They differ in the amount of open space available to allow farming to continue. In general, the definition of cluster development often assumes that all the lots will all have single-family detached houses. Planned is a type of cluster development where the type of housing is not limited to single family detached. In a planned development all housing types are permitted in the cluster. There are three basic cluster approaches.



- a. **Cluster.** This option cannot protect agricultural because the open space provided is inadequate.
- b. **Conservation Cluster.** This option has a minimum of 50% open space and can rise to the high 70% range. It would be effective in some landscapes where only about 50% of the site is rated as good agricultural land, thus preserving the agricultural portion of the site may be feasible.

The problem in Jefferson County is that on such farms the majority of the rest of the site is unlikely to have suitable soils. The conservation cluster may be more effective in orchard areas, where the remainder can be more effectively used for agriculture than as the case of small fields for crops.

- c. **Preservation Cluster.** This form of clustering assumes 80% open space and can reach levels in excess of 95%. As with the conservation development, the higher the open space the greater the level of protection that can be afforded agriculture. For developments using septic tanks the range of densities are limited. In Table 8, the range of options is shown for both cluster and planned options. This was an early variant on the 40 acre zoning. The density is identical, but by using one-acre lots it produces 97% open space. It is effective but has a low commodity value. It is a very low density form of preservation cluster.

Table 8 Alternative Cluster and Planned Densities				
Option	Lot Size	Density @ 50% Open Space	Density @ 75% Open Space	Sewer type
Conventional				
	15 acre	0.092 dus/ac. No Open Space		On Lot Septic
	10 acre	0.067 dus/ac. No Open Space		Sewer*
Clusters				
	3 acre	0.147	0.071	On Lot Septic
	1 acre	0.404	0.151	
	20,000 sf.	0.794	0.362	Sewer*
	15,000 sf.	1.043	0.478	
	10,000 sf.	1.366	0.598	
	7,500 sf.	1.742	0.736	
	6,000 sf.	2.147	0.919	
Planned				
Duplex	4,500 sf.	2.944	1.271	Sewer
Townhouse	2,500 sf.	5.300	2.287	
Condo	2,000 sf.	6.625	2.859	
*Sewer means any sort of system that treats multiple lots, group septic system, land treatments systems, or package sewer treatment systems.				

- d. **Hamlets and Villages.** This is another variation on preservation clustering using all dwelling unit types but allowing non-residential uses as well. It is designed to create a whole community with several housing types, convenience store, bed and breakfast, and some employment opportunities. In general it would require open space in excess of 90%. The density yields are somewhat lower because between five and ten percent of the developed area would be non-residential. Another element

of the hamlet and village concept is that not all the land would need to be contiguous. This allows all the development to be clustered on one of several farms. It also is designed to be used to create a new hamlet or around an existing unincorporated hamlet to create a stronger community. This means the existing hamlet is increased in size density and offers commercial uses for its residents and those of surrounding rural areas. The non-contiguous nature requires a transfer of development potential. Because of the high open space ratio and low density, a large area is needed to create a real community. Hamlets should have a minimum of 50 dwelling units and Villages 200 dwelling units. This means __ acres for a minimum.

As the proportion of open space increase, the more effective the cluster plan becomes at preserving the resources. A wide range of densities is achievable. One of the key variables is sewer treatment. With conventional septic tanks, the key variable is lot size and soil conditions. For traditional septic systems on lot, the minimum lot size is one acre and that sets limits. With either group of systems, land treatment, or sewers lot size can provide a greater range of densities. Table 7 illustrates the range of densities achievable with conservation clusters. The planned cluster types which can use other forms of density provide even higher densities.

6.2. Development Forms

These options are far more effective at matching the commodity value of the land than the conventional lot size approaches are. At 75% open space the density yields that are in excess of the current one home per ten acre maximum. Higher the open space ratios mean that it is easier to preserve useable blocks of farm land of good quality.

The range of densities possible with preservation clusters is lower than that with conservation clusters but they are much more effective in preserving agriculture. Those capable of matching the current 1 unit per 10 acre standard are highlighted in color in Table 9.

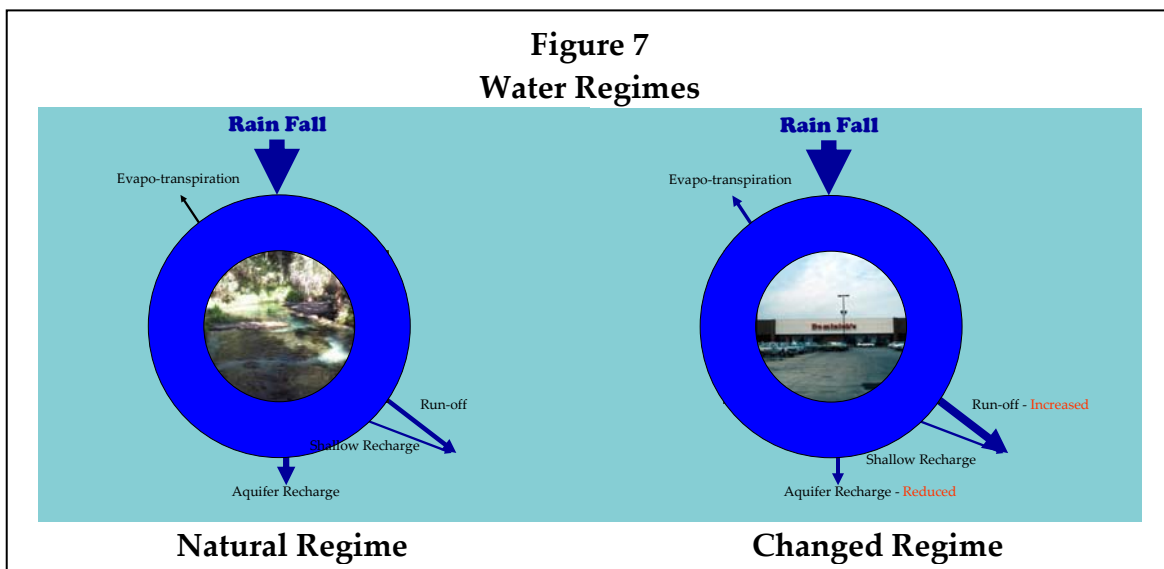
6.3. Water and Resource Protection

One basic element of resource protection is similar to agricultural protection in that resources such as floodplains, wetlands, sinkholes, steep or unstable slopes. Or wildlife habitat are defined as resources that are protected to some level. A second approach looks particularly at the water cycle and the impact of development on the water regime. In the first approach, a portion of the resource is to be protected. For example it might be decided that 60% of a given resource should be protected. This is a policy matter, but it establishes a specific level of protection that is clear and unambiguous.

The quantity and quality of ground and surface water are both important in Jefferson County. Because the rural area is reliant on ground water a key issue is recharge quantity and quality. At the County scale there is a limited amount of recharge, ?? inches

per year on the average. This is a variable from year to year. To serve the community, the aquifer must be recharged or it will run out of water. In pre-settlement times, rain recharged the aquifer and water flowed out of the aquifer in springs at a rate equal to the recharge over time. Once settlers began drilling wells the natural cycle was modified. Simply put, as a well withdraws water, less is available to flow out of springs.

Modern development has significant areas of impervious surfaces which also modify the water regime by increasing the rate of run-off and decreasing the amount of recharge. Figures 7 and 8 illustrate the change in regime that occurs when development occurs. This is an important factor in determining the safe yield of the aquifer. An important safety margin, the loss of recharge to run-off needs to be taken into account in determining safe withdrawal rates.



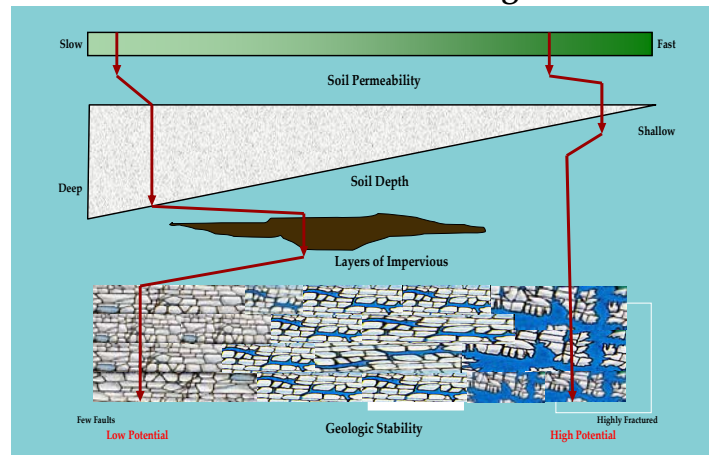
In a karst environment the aquifer is subject to being polluted by contaminated water. In Figure 7 the major factors effecting the vulnerability of the aquifer to pollution are shown, permeability of the soils, depth of the soils, the existence of an layers of soil or rock that do not transmit water, and the degree of fracturing in the limestone. If the aquifers water quality is to be protected as source for domestic water and to protect water quality in springs and streams, it is important to identify areas of high vulnerability. A rating of land for low and high vulnerability will be an important element.

Conventional, Euclidian, or cookie-cutter zoning has been generally discussed in agricultural protection and the basic elements of density and commodity value are the same. For natural resource protection and water quality protection the issues are different than for agriculture.

1. **Large Lot.** This is a lot ranging from one to ten acres and relies on septic tanks for sewerage disposal. At the lower end of the range, one to two acres there is no value for resource protection because large homes, drives, decks and septic system take up so much of the lot. At around five acres, natural resource

protection can very often be achieved on lot. To do so effectively, building pads would be required to be established to limit the area that can be disturbed. For water quality, the one problem is the length of street per dwelling unit is high and this means much extra impervious surface. For water quality, density and impervious surface are critical, and these alternative do not fare well on a population or dwelling unit basis.

Figure 8
Pollution Potential under
Conventional Zoning



2. **Very Large Lot.** The range of lot sizes is 15 to 25 acres. These size lots are very protective of most natural resources. Again a building pad should be required to limit development impact and protect on site resources. The densities here are low and such lots should have little environmental impact, but on a per dwelling unit basis these are not good alternatives.
3. **Extremely Large Lot.** Lots of 30-80 acres are extremely large and while effective in resource protection use very large amounts of land. Few roads are needed to support this type development.

6.4. Cluster and Planned Developments

Cluster and planned development have been discussed previously. Figure 5 illustrated four development forms, conventional, cluster, conservation cluster, and preservation cluster. In resource protection, the value of each option is largely dependent on the site's unique mix of natural resources. Thus, a site with few resources has more options than one with most of the site in natural resources. From the water quality and quantity standpoints, the more of a site that is in woodland or grasslands, the better.

1. **Cluster.** This option can protect natural resources when there are few on site so that the districts minimum open space is capable of protecting all the sites resources. This alternative is less likely to be beneficial for protecting water resources because too much of the site would be disturbed.
2. **Conservation Cluster.** This option has a minimum of 50% open space and can rise to the high 70% range. This should be an effective technique on the majority of properties in the county. Only sites that are nearly 100% resource limited

would be impacted by this development option. It will also work for all areas that are not rated as having high vulnerability for ground water pollution.

3. **Preservation Cluster.** This form of clustering assumes a minimum of 80% open space represents the best strategy for highly vulnerable areas or sites that are entirely resource restricted. It provides for maximum protection.
4. **Hamlet and Village.** This alternative shares the benefits of the preservation cluster, particularly where the development is located on the least vulnerable or resource limited area. It is essential that the location of the hamlet or village be controlled by the county to insure minimal impact.

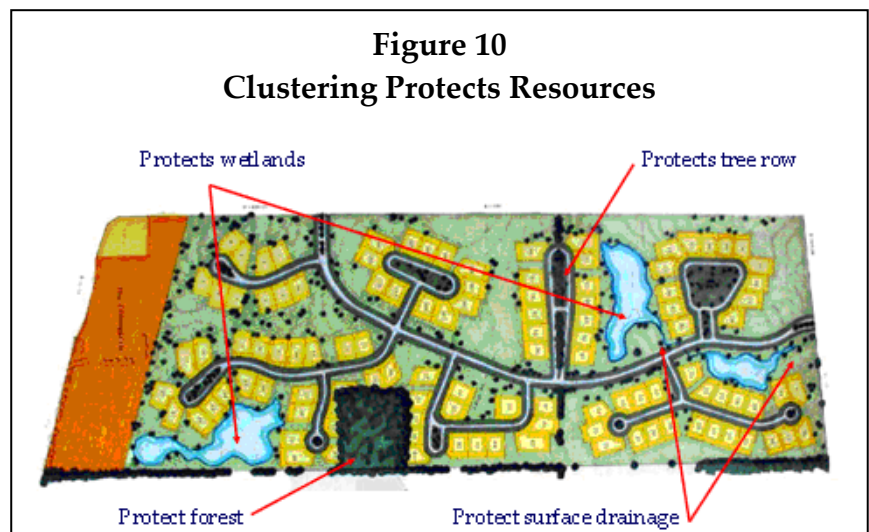
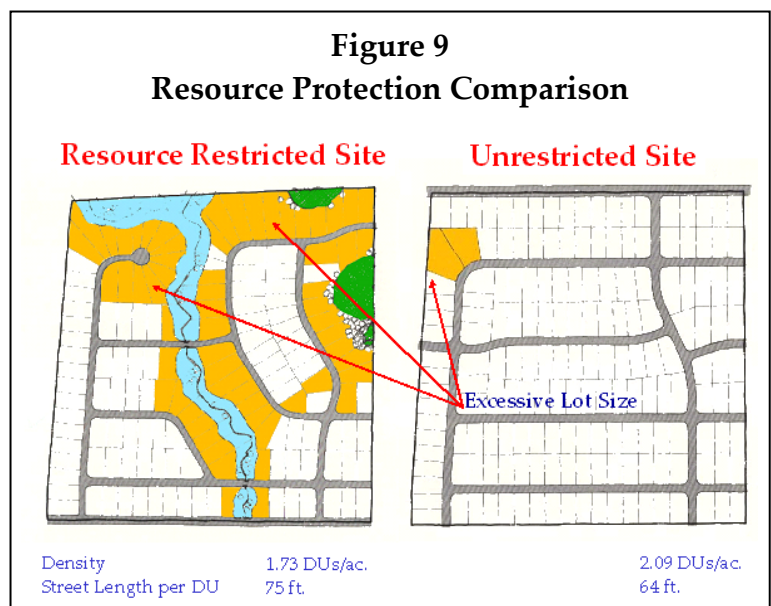
6.5. Natural Resource Protection

Conventional zoning works against resource protection. Figure 9 shows that a site that has resources on it loses density and increases the costs of development of roads and other utilities when compared to a site with similar size but no natural resources. This is a powerful disincentive to protect resources.

Performance zoning uses the various cluster options as the basis for all districts. There would be incentives to cluster because that allows a developer to get the density, protect the resources, and reduce the cost of

roads and streets. This represents an incentive to cluster rather than close the conventional development option. Figure 10 shows how a cluster plan preserves all the resources on a site, wetlands, a small forested area, tree row, and natural drainage.

The major element that performance zoning introduces is the concept of site capacity. It is based on the concept that land has a carrying capacity, a well established ecological principal. In this concept each natural resource that needs protection would be given an open space ratio that



indicated the degree of protection required.

A developer or person seeking rezoning would have to conduct a site analysis based on on site analysis, topography, and surveys to measure the amount of each resource present on the site and map them. The calculation accounts for all the resource land that must be protected and compares that against the minimum standards of the district. If the resources present require more protection than the district minimum the maximum capacity of the site is reduced. This mimics the way in which a farmer would evaluate a farm to determine if the price were right. The various soil types present would be evaluated to estimate average annual yields that could be obtained and that would set the price. This does the same for development.

Table 10 shows an example of the types of natural resource that might be protected in Jefferson County. The values have not at this point in time been fully tailored to the County, but represent values used elsewhere around the country. *Should the County desire to use this approach, there is substantial work in making sure the standards are finalized.*

Table 10 Typical Resource Protection Standards	
Resource	Open Space Ratio (OSR)
Floodway	1.00
Floodplain	1.00
Wetlands	1.00
Wetland Buffer	0.85
Drainageway	0.60
Sinkholes	1.00
Sinkhole Buffers	0.95
Sinkhole Drainage Areas	0.80
Aquifer, High Risk Area	0.95
Aquifer, Medium Risk Area	0.70
Aquifer, Low Risk Area	0.35
Forest, Mature	0.65
Forest, Young	0.45
Steep Slope greater than 30%	0.90
Steep Slope 12-30%	0.60

The site capacity system requires the developer to meet a specific standard of protection. This is in contrast to most conditional use or planned unit developments (PUD) where there is often a vague subjective standard such as “protect the environment to the maximum extent possible”. A subjective standard encourages people to chose sides and argue that the standard is met from very different perspectives, a problem the County has experienced in the past. This type of regulation makes it clear to landowners that the natural conditions on the site are important. As can be seen in Table 9, the standards can apply to natural features or subsurface conditions for all sorts of resources.

A similar strategy can be applied to septic tile fields. The soil conditions can effect the area of the disposal field, or even its construction. The number of replacement fields can also change with soil conditions. The effect of these is also to increase the area of the site, making it possible to increase the separation between wells and drain fields.

6.6. Affordable Housing

Affordable housing is a very different objective that is driven by land economics and income. In its simplest form, the term affordable housing refers to housing for families that cannot afford housing built by the private sector, and in many instances older market housing. There are state and federal programs that define affordable housing with great precision as to who is eligible for such housing on the basis of family size and income. This narrower definition leaves out working families and individuals whose income is above the thresholds to be eligible for various state or federal subsidies. This group often includes public employees such as school teachers, firemen, police, and nurses, as well as people in unskilled or serve industry jobs. The housing market boomed in the early 1990s and continues today. This has resulted in a significant run-up of land and housing costs exacerbating the problem. Many people commented on the presence of two economies in Jefferson County, the lower one is greatly in need of affordable housing opportunities.

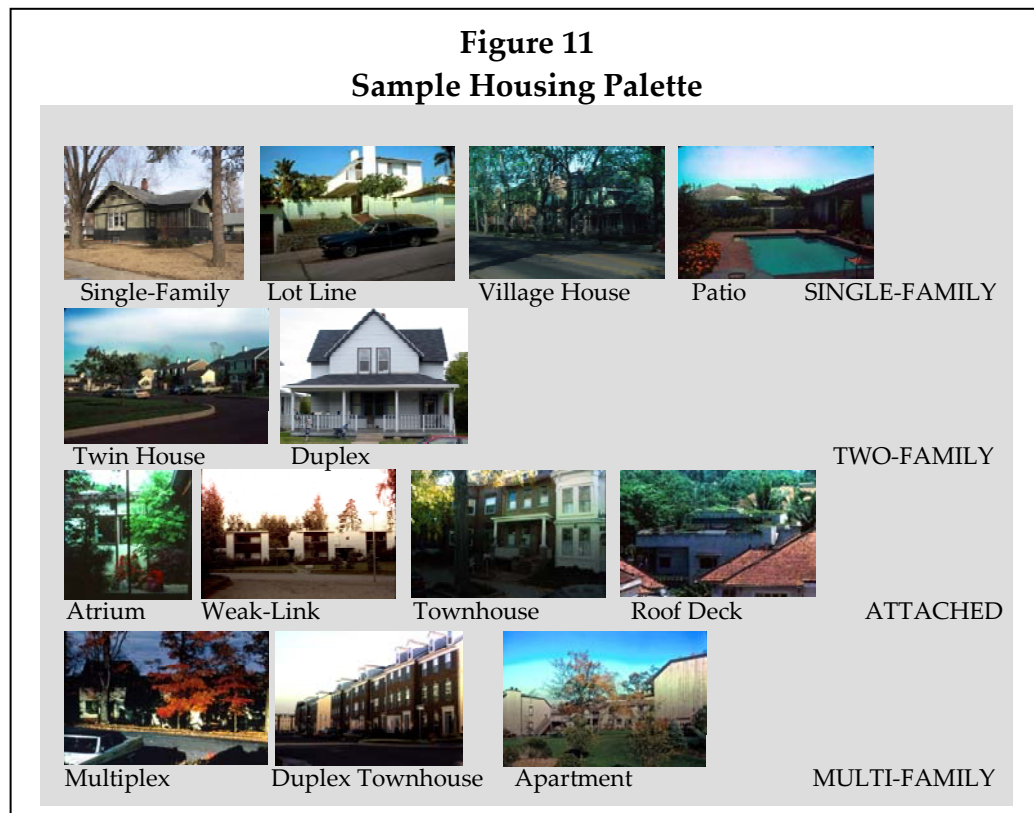
As with natural resources there are two separate strategies for requiring or stimulating the development of affordable housing:

- Government programs designed to increase the amount of housing available by some form of subsidy for the builder or tenant.
- Regulatory measures to attempt to increase the percentage of the market that “for profit” housing developers can meet.

Both approaches are needed; neither has proved capable of doing the job alone. Described below is a series of more specific approaches to increase the amount of affordable housing:

1. **Greater Variety of Housing Types.** There is a wide range of housing types from large luxurious single-family homes to apartments and manufactured housing. Most ordinances including Jefferson County’s make it more difficult to build the housing types that are most affordable. If a dwelling unit type is a conditional use requiring additional review, it will make it more difficult to provide needed housing. Making all housing types available as a matter of right is desirable. A wider range of residential single-family lot types should be provided so that developers have the ability to pick a lot size matched to their market. Several lot arrangements that permit traditional neighborhood development should be included. Zero lot line and patio homes should also be available. There are three types of two family units that meet a variety of needs. In addition to various types of town houses, atrium, and fourplex units all provide for attached housing. Multi-family units also come in a variety of forms. With performance

zoning the planned option all are permitted as a matter of right with specific lot standards. Figure 11 illustrates a housing palette providing a wide range of unit types.



2. **Allow Variable Lot Areas.** One of the things that makes zoning rigid is the minimum lot size and lot frontage; it creates inefficiency. Inefficiency results in more street and utility costs per lot, raising the cost of housing. Thus, with small or irregularly shaped parcels of land fewer units can be produced than on an ideal site and at greater cost a double hit on housing cost. The variable lot concept provides for three lot sizes required for each housing type or lot size; small, average, and large. Each has a different frontage requirement altering the cost of streets and utilities. A percentage of the units are required to be small and medium to insure proper variety. This makes it somewhat easier to achieve the permitted density. There are two even more important aspects of this one designed to make housing more affordable, and the other to improve design.

Each of the units is given a maximum floor area ratio to insure the homes do not overpower the lot. The smaller narrower lot is intended to be more affordable than the average. It has less area and less frontage, thus some development savings. The larger lot makes up for the loss of value on the small lot by providing more valuable lots for bigger homes. The floor area ratio of the

smallest lot is intentionally proportionately lower to make the small unit less costly.

Monotony is a curse of production housing, and although most good developers try to provide some variety, building mass and similar floor plans make this a difficult task. The fact that there are three lot widths and house sizes increases the variability in floor plans and building mass reducing monotony while at the same time providing more affordable units.

3. **Permit Accessory Dwelling Units.** The accessory dwelling unit or “granny flat” as they are often called are a second generally smaller unit in the same house, which has separate cooking and bath facilities. Most often, they are designed for a single person, but can be made suitable for parents to live with a child’s family. These can be affordable units, particularly the smaller units. When the respective living quarters are similar, there is a high likelihood that the unit is a two family unit. It is recommended that there be a limit on the size of the accessory apartment relative to the rest of the unit. There are three common forms of this unit. The first form is the accessory unit is in the principal structure on a different level or wing. A second common form is a unit above a detached garage. The last form involves a separate structure. Setbacks need to accommodate these forms.

There are some issues with the accessory dwelling unit. It often is a two family unit with a need for automobiles for both families. Thus, parking and sewer must be adequate for the increased occupancy. While many units are initially for an elderly or young family member, they will likely end up being a rental property. The fear about this housing type is that the unit is a district that is described as a single-family district, a condition not meant when there is a rental unit in addition to the single-family home. One of the risks is that both units become rental properties altering the character of what was once a single family neighborhood. The fear is that the neighborhood will change to a rental neighborhood leading to neighborhood decline.

Another approach is to require the unit to be permitted only in new subdivisions with appropriate design controls. This provides every person who buys the knowledge. A second problem has to do with impact fees. The unit is technically a two family unit and Mac; there are two possible options, does it warrant a lower impact fee – if it is truly affordable, the county pays the fee.

Another form of accessory unit applies to elderly residents of large homes who need to rent space and also need the assistance in keeping the house up. This may not involve the creation of a kitchen or any conversion within the home. Because no new dwelling unit is created specific authorization of this should be permitted.

4. Specialized Housing Types

- a. **Small One Bedroom Units.** There are a number of households needing affordable housing that have different needs. The elderly and may young people can do with smaller units having a single bedroom. These can mean single-family residences with very small lots and unit sizes under 1,000 square feet. Figure H illustrates four different one bedroom units designed to be affordable. Four to six of these units may be places on a normal lot without destroying the character of a neighborhood. They can be used by non-profits to provide targeted housing or be used on the transition between residential and commercial, or along major roads.
 - b. **Worker Housing.** There are a number of businesses or industries that have a need for employee housing, the race tracks (horse and automobile), farms, service businesses such as restaurants or hotels, and training facilities. For these businesses, dormitory or small apartments may be needed. This use can often be accommodated on the site of the business. Farms have large land areas. Hotels could have employee quarters built in, and restaurants could have apartments above them. To the extent that these facilities can be predicted with specific use, the ordinance can provide for them. As a use, this is not much different than a rooming house and should be permitted in commercial areas. Very large facilities with lots of employees of this type might be required to provide housing. While not really a zoning action, the county may want to work with the business community to seek to develop such housing that serves a number of smaller businesses.
5. **Provide Housing Bonuses.** One strategy that has been used frequently is a density bonus. In suburban or urban areas apartment developments need to provide the highest density consistent with their community character. For this unit type, density is very important. One of the problems with density is that once a density is set the market determines the highest supportable value. Over time this leads to increased land values that make the housing less affordable. The strategy that is designed to address this is the housing bonus. If it is deemed that apartments at 25 units per acre would produce the most affordable units, zoning the area for 18 units per acre and providing an increase to 25 if a percentage of the housing (20% for example) was affordable. The developer received a density increase of 39% while having to make only 20% (5) of the units affordable. For the developer doing low income housing the density increase lowers the per unit land costs. This type of housing is targeted to those eligible for state and federal programs. There are other groups whose need is not presently met by the market and who are not eligible for the subsidies. These are people working in the County.

A bonus system should also meet the needs of others priced out of the market. In developing a bonus system it is important to look elements of cost. The cost of a

dwelling unit is divided roughly between the improved site (land costs, roads, water, and sewer) and the cost of the structure. The improved lot should be about 25% of the total cost and the building 75%. This fact provides another form of bonus. The maximum density for market units sets the value of raw land and improvements. A bonus unit is just that, the total cost of the land does not change as a result of the bonus, it thus becomes possible to write down the cost of the land for the bonus units. In the example above, the developer must write down the cost of the land on five affordable units by has 20 rather than 18 units among which to divide the land costs so each of the market units has reduced land costs and the developer gets a bonus of two market units. The same is largely true in regard to the cost of roads and utilities. The developer must write down the cost of land and infrastructure to zero in return for a density bonus and that also provides additional market units. The bonus works very well with the average lot policy, because there would be a number of lots that were smaller and cheaper providing smaller houses. The net result should be a situation where the housing cost can be reduced by 25-30%.

6. **Require Mandatory Affordable Housing.** It would be nice to think that the development community would embrace the voluntary housing bonus. That is not normally the case. Developers fear to advertise or have it known that their development is offering affordable housing. This occurs despite lots of rhetoric about the need for affordable housing. The reason is quite simple, no developer wants to take the risk in sales resistance; further, greater profits can be reaped with high end housing. For this reason, mandatory affordable housing should be considered. A whole series of approaches have been suggested, each one of which would help make the market able to reach a marginally greater share of the market. Unfortunately, in Jefferson County's housing market any such savings will be quickly lost. A mandatory housing bonus that uses the economic incentive and the other incentives, but makes participation mandatory will be needed. The earlier the County takes decisive action the better. The lessons of ski and beach resorts (in other regions of the U.S.) is obvious: they gradually attempted to deal with the problems of housing their employees incrementally, and only after it had become too late for most of the lower wage work force, were the mandatory systems put in place. Government also ended up having to expend substantial local funds. The earlier the situation is addressed the less painful it will be for everybody.

6.7. Infrastructure and Levels of Service

In Jefferson County growth management is primarily concerned with insuring the roads, schools, water, and sewer have capacity to serve all new developments at the level that the county's citizens want. For each of these there is a desired level of service. For roads these are levels of service A through F, with C or D being the desired level of service. For schools it would be pupils in a classroom. Water has specific pressure and delivery rates

that relate to home delivery and fire suppression and sewer treatment plant capacity and effluent quality. Fire and emergency services also can have level of service standards. Government must have tax revenue to provide the services. There is a year tax lag in real estate taxes so the demand for services arises before taxes. All the roads are state highways and there simply is not money to keep up with the demand on these roads creating congestion.

Planning for growth areas makes the provision of services less expensive by permitting the government to design cost effective facilities expansion. There is far more land that could be developed in the Jefferson County than there is demand over the next 30-50 years. Thus, it is important to control the location of development to have a planned and affordable expansion plan. Reacting to development which is driven by random sales of property to developers is the most costly and inefficient way to have to provide services. The County has impact fees that address some of the problem. The potential is significant for landowners to seek out rezoning in the county (including conditional use permits) or annexation and rezoning forces government to react. It also engenders conflict between city and county. Several alternatives are available to address growth issues.

1. **Abandon Urban Zoning.** In many respects, Jefferson County is perceived to be in competition with the cities of Ranson and Charles Town for new development. There appears to be a significant overlap between the two cities' designated growth areas and the areas zoned in the County's RG—Residential Growth zoning district. One approach to the issue of providing urban services is to alter the County's zoning to eliminate *all* urban or suburban districts and relinquish control of future development to the cities. One exception to this is the needs of unincorporated communities. In theory, there could be significant benefit gained from this approach, but it must be remembered that a large share of local services is provided irrespective of municipal boundaries. The only significant benefit of municipal annexation is from the potential of enhanced streets, parks, and police protection offered by the cities. Water and sewer, while provided by Charles Town and Ranson, can be provided by other agencies. Finally, Jefferson County has already postured itself to provide higher levels of public service to its non-rural residents. For these reasons, it would appear that this approach would be unacceptable to County officials.
2. **Market Performance Zoning.** Many people indicate that the market should be permitted to operate free of government regulations and growth will take care of itself. The problem is that the market really does not address the adequacy of roads, sewers, and many other governmental services. The person buys a home, and if infrastructure is inadequate, their only recourse is to come to the elected officials and seek improvements. For roads, state government is so remote and so limited for funds, residents must simply live with the inadequacy. People who purchase a home in a rural area have no understanding that if their home catches on fire, it is likely to be destroyed because most rural areas do not have the

ability reach the site quick enough and have adequate water to limit damage. Infrastructure, other than basic connections, are not part of the market equation, one buys a home with public water, not a guaranteed pressure and flow rate. Because infrastructure is not part of the market equation the market cannot provide a solution. Thus, the public turns to impact fees, adequate facility ordinances, or zoning to solve the problem. There is another option that harnesses the market, market performance zoning.

Market performance zoning simply includes controls that force the market to price infrastructure. For example, a rural road network is divided into traffic sheds. Such roads might have a capacity of 713 to 1,040 vehicles per hour at level of service (LOS) C and D respectively. Presently, zoning permits development to continue and only when buyers find it difficult to get to the site because of congestion is there some impact on the market. Adequate facilities ordinances stop development when a specific level of service is reached. Impact fees try to raise enough money to improve the roads. The market performance system sets the LOS for roads, sewers, water, or other infrastructure or service. The existing usage is subtracted from capacity to give remaining capacity. Every landowner is given a proportional share of the capacity available, thus a land owner who owns five percent of vacant land area in the area would receive five percent of the capacity. The actual zoned density can be very liberally set since market performance modifies the density.

The LOS for a road indicates the peak hour traffic that the road can support which can be converted into the number of dwelling units. For water, line size and tank capacity govern LOS. A service area is defined for each facility, traffic sheds for roads, water sheds, and sewer sheds. The area of vacant land in the service area or shed can be measured. The road above has a capacity of 713 vehicles per hour (vph) and 200 existing trips leaving a capacity of 513 vph. In a 1,000 acre traffic shed, the maximum density is 0.513 vehicles per acre. With single-family generating 1.01 trips in the peak hour this means 0.508 dwelling units per acre (1.97 acres per dwelling unit).

Capacity: 513 vph divided by 1,000 equals 0.513 vehicles per acre.
Residential density: 0.513 divided by 1.01 equals 0.508 dwelling units per acre.
Lot size: one acre divided by 0.508 equals 1.97 acres per dwelling unit.

The market takes effect, because each traffic shed has its own capacity, so a developer can shop for land that has optimal density. However the market provides options to the land owner. For example if the width of the road were increased to 12 foot lanes and obstructions removed so that there was a 4 foot distance to obstructions the road capacity is increased to 874 vph. So remaining capacity goes to 674 vph an increase of 31%. The density is now 0.667 dwelling units per acre (1.50 acres per dwelling unit). There is a cost to widening the road. If the developer can get financing for the land and the improvement, he can build at the higher density and the market establishes a mechanism for the private sector to make improvements in order achieve greater profits.

The system is very flexible as can be seen in the number of options and outcome between a developer and land owner of 100 acres zoned for 1.5 dwelling units per acre with sewer and water but one acre lots on septic tanks.

1. Purchase and build at the permitted density. Build 50 homes on approximately 2 acre lots.
2. Purchase and subdivide the property for a first phase of development with 50 homes on one acre lots. Reserve 50 acres for future development should the road be improved. If the land had public sewer and water that would support a higher the lots might be half acre and more land reserved for future development.
3. Purchase and subdivide the property for a first phase of development with 50 homes on one and a half acre lots. Reserve 24 acres for future development. Take the profits from the first phase of development and make the road improvements in the prior example and build an additional 16 dwelling units. As in the prior example if water and sewer were available lot size would change. In this example, the location in the traffic shed becomes very important. The property near a major road would have a short stretch of road to improve while a person near the top of the traffic shed might have miles of road to improve. The short improvement might be very affordable and attractive, while no lender would consider an improvement of miles of road. In this case the market operates in the same fashion as a government with limited money to spend.
4. Purchase the site and buy development rights from a landowner well into the traffic shed that wants to keep farming (see TDR discussion). This would enable the developer to reach the maximum density of the property under the zone (100 dwelling units with septic or 150 dwelling units with sewer. The developer has the ability to develop to the maximum, and the farmer who wants to continue in agriculture gets cash that enables the farm to be improved or its debts to be eliminated.
5. Purchase, buy development rights, and make improvements. This approach achieves maximum density by a mix of improving the road and buying development rights and would be used where the improvement costs are cheaper on per unit basis than buying development rights.
6. Create a new traffic shed. This option would be limited to large landowners who have access to a major road with significant capacity. If traffic shed densities are very low, large traffic sheds and significant spacing between shed roads a developer would be able to create a new traffic shed serving several properties. This has an advantage to all parties. The developer gets access to a traffic shed with greater development potential. The landowners in the old traffic shed(s) now have smaller sheds and thus an increase in density.

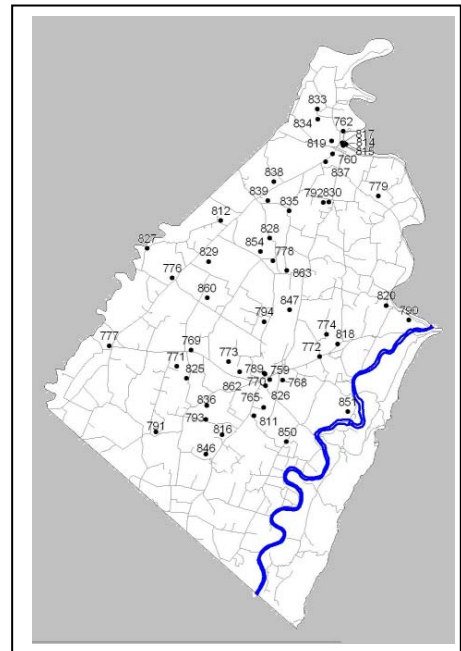
7. The landowner asks too much for the land given traffic shed limits and the developer seeks a better site
8. A similar approach is used for all the various elements of infrastructure. The government would continue to invest in infrastructure but can do a better job of planning expansions in the most cost effective manner because they do not have to worry about facilities being overburdened by development, and then reacting to people who have major problems due to over building. The one difficulty with the system is it requires a extensive planning that is not currently in place.

6.8 Historical Preservation

With dozens of early settlement, Revolutionary War, Civil War, and other significant historical sites and buildings throughout the County, many citizens have expressed concern of the potential loss or degradation of the County's historical sites to development. The Comprehensive Plan recommends the adoption of regulations and policies that will:

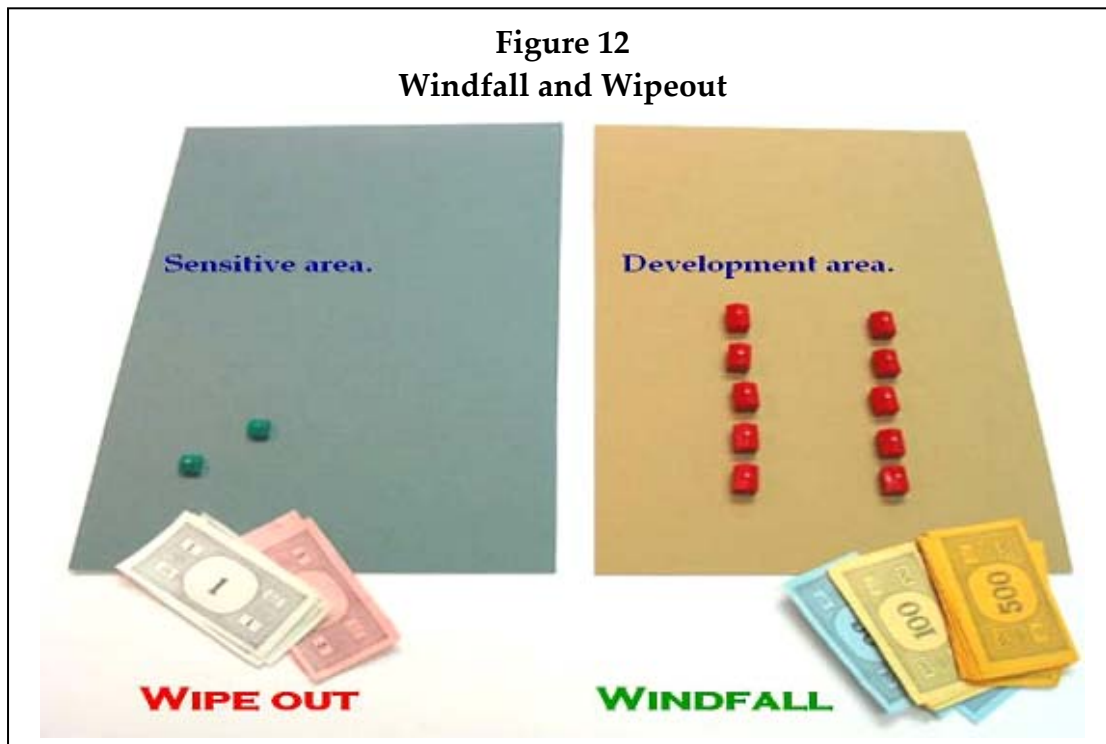
- Provide bonus incentives for development that preserves, or at least is compatible with, nearby historical properties and buildings.
- Permit and encourage adaptive reuse of historical resources, where deemed appropriate
- In those instances where a site or building cannot be preserved, require extensive documentation (photographic and other means) prior to demolition.

As the ordinance rewrite process proceeds, further discussions will be needed regarding these and other possible historical preservation measures. It must be understood that, although zoning can provide some protections of historical areas through land use regulation, growth management, incentives, and performance standards; the most effective measures of protection begin with various forms of acquisition and program development.



7. TRANSFERABLE DEVELOPMENT RIGHTS (TDR)

The concept of transferable development rights (TDR) to protect sensitive resources has been around for over 30 years. While there have been very successful TDR programs, many more have failed completely or only been marginally successful. Because of this history, caution is needed as TDR has some potential to be a useful tool on a limited basis. Ultimately, the primary cause of these problems with TDR is the failure to understand the market nature of TDR. For TDR to work, a willing buyer and a willing seller must agree on a price that both find fair.



A short discussion of TDR is important to understanding the options. With any zoning change that increases density, value also increases—a windfall to the landowner. Down zoning land down to a lower density was referred to as a wipeout. Figure I2 illustrates the imbalance between zoning categories.

TDR is a zoning system where land that needs to be protected (sending area) is severely restricted in development potential through a down zoning. In Jefferson County this might mean going from a zoning of one house per ten acres to one house per fifty acres. This would certainly quite residential demand in that area, but would reduce land values. To avoid reducing land values the TDR program grants to the owners of land in the protection area, development rights that may be sold in the real estate market and which permit the purchaser to build housing in a designated zone (the receiving area). The purchaser pays for the additional units as they would for raw land. This sounds like the magic bullet. It is too good to be true. While the concept is simple its practice is much more complex. To work there needs to be both a willing seller and a willing buyer. The

seller wants current fair market value for the development potential that is lost. The developer's decision on what to pay for a development right is more complex. He must buy the land on which the development is to be transferred, then buy development rights for additional units. The value of the development right is variable on the unit type. The developer of apartments will pay less for a development right than the developer of ½ acre single-family lots. In addition, because the density increase is an incremental value, the TDR system must accommodate these factors. To insure there is a willing buyer willing seller, there needs to be economic incentive to the restricted landowner to want to sell by increasing the allocation of rights. Ideally, the value at which a developer is willing to purchase should be higher than what a landowner wants to account for a varied population.

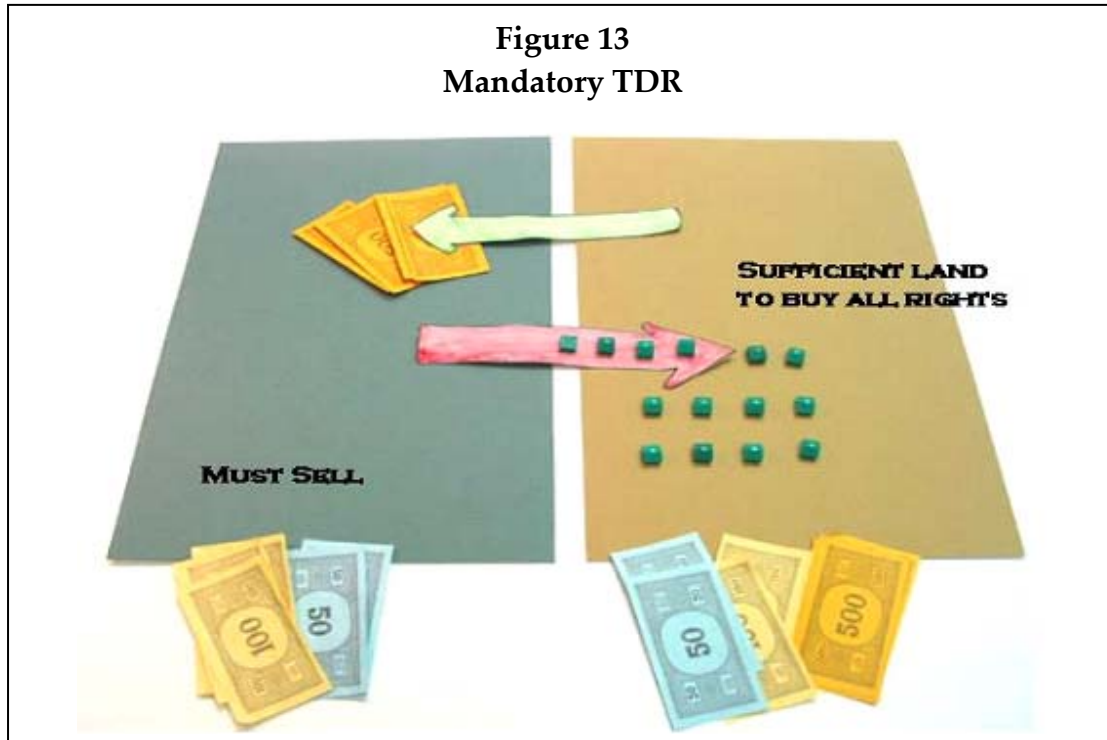
TDR is often considered in trying to preserve agriculture or other large areas of natural resources. This is the place where TDR is weakest. In addition to getting development rights properly prices, the potential purchasers of development rights must be 1.5 to 2.0 times the rights available. The reason for this is that not every purchaser will use all the development rights potential of a site, and some may see a very different market and buy few if any development rights. The result of this is that TDR is not good as a primary tool to protect large areas unless the market for development is extremely active. Most communities have found that only a fraction of the area to be preserved can be protected.

There are a number of potential TDR systems to consider. Under West Virginia law a referendum must be held to establish the program. This applies to all formal TDR alternatives.

7.1. Mandatory TDR

The original TDR is what we will refer to as a mandatory TDR. The area to be protected (sending area) is identified and protective zoning put in place. For Jefferson County this could mean leaving existing densities with mandatory preservation clusters. In an area where development was desired (receiving area) where the development rights would be transferred, higher intensity zoning and the permitted increase in density is specified. Rather than just assign densities to the growth and protection areas, creating windfalls and wipeouts, TDR gave the lower intensity protection area development rights that could be separated from the land (Figure 13). Instead of increasing the intensity in the receiving area by zoning change, the increased density was dependent upon developers buying development rights from the protection area to attain the maximum permitted density. From the Figure J, it is clear that the landowner selling development rights is going to expect to receive the same value for selling development rights as would be obtained by selling the land to a developer. A mandatory system places the greatest demand on the design of a TDR system. A market study is needed to ascertain the fair value of land in the sending area. If landowners do not feel they are being fairly treated, they will not participate in the program.

Figure 13
Mandatory TDR



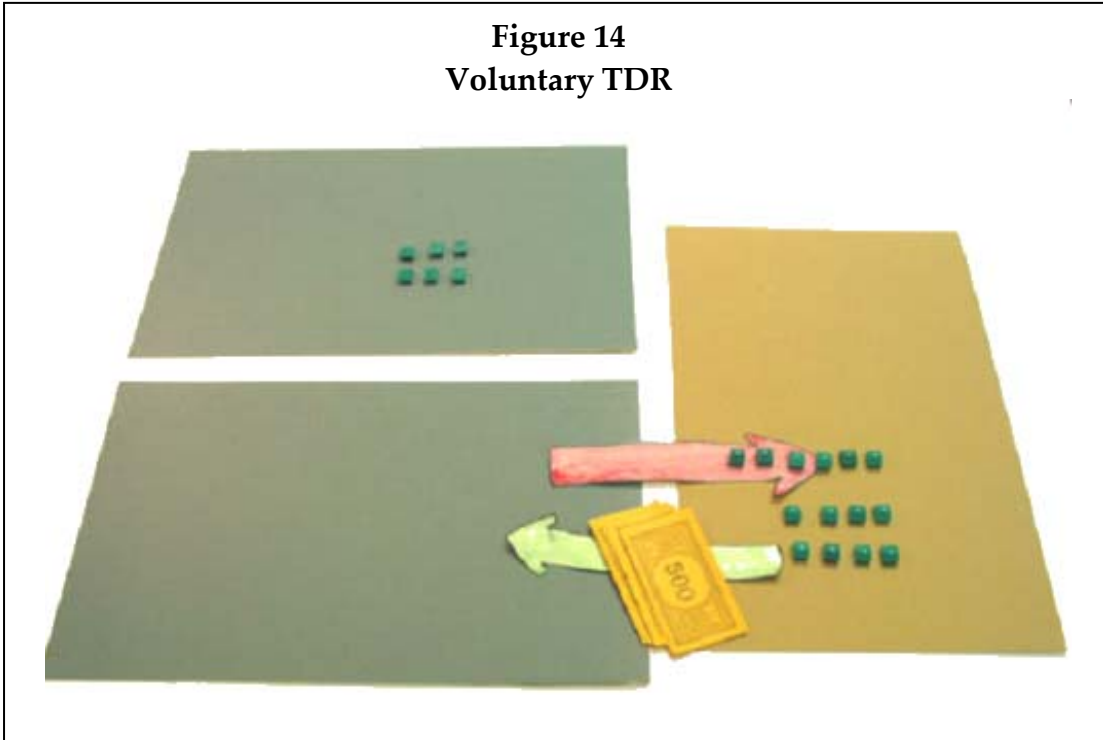
7.2. Voluntary TDR

The complexity of the mandatory system has led to many communities going to a voluntary TDR program. A landowner has the option to sell development rights or to sell the land for development. A voluntary system works where there are more resources to protect than a receiving area can absorb.

The concept of a voluntary system is outlined in Figure 14. The voluntary system recognizes that not all land can be protected with TDR and mixes TDR with a base density that is similar to existing rural densities.

The challenge with Voluntary TDR is to create enough incentive so that landowners actually use the TDR system. In the receiving area, a market analysis is still required to determine the value of development rights for different product types and the incremental value of the development right. To make the voluntary system work, there needs to be an incentive to sell, rather than to build. The incentive could be a straightforward bonus; a ten percent bonus to projects that use TDR would be an example. In that case, the project that used all the TDR possible would get a bonus over and above the development potential of the landowner who opted to build, rather than to transfer.

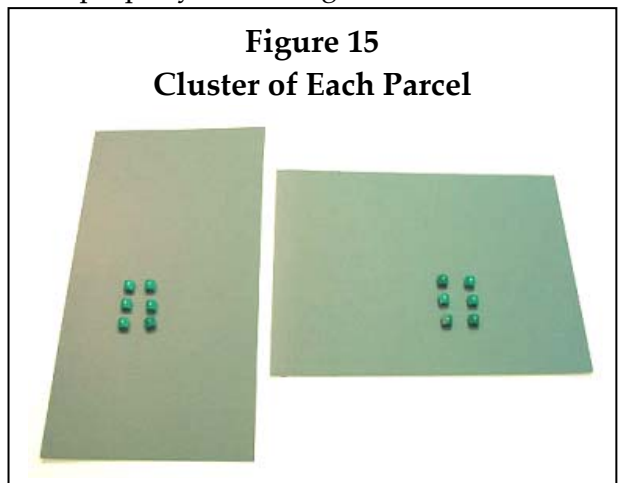
Figure 14
Voluntary TDR



7.3. Non-Contiguous Development TDR

A third type of TDR, non-contiguous development, is ideal for rural areas with low growth rates. Basically, the internal transfer is clustering on a large scale. In cluster development, a portion of the site is more intensely developed while the remainder is open space. Internal transfer goes beyond the individual property, clustering at the scale of a zoning district so that non-contiguous sites are treated as a simple cluster development. This, too, is a voluntary program. Another way to describe it is as non-contiguous development. Instead of each property having a cluster (Figure 15), the development can occur on properties that are separate from each other by one or more intervening properties. Within the zoning district, the transfer (Figure 16) is to a property that could be some distance away. This form of TDR also needs an incentive to encourage developers and landowners to select this option, rather than to build.

Figure 15
Cluster of Each Parcel



The non-contiguous TDR has particular application to the preservation of historic properties that need to be protected in a setting. A small scale TDR would permit the transfer of development else where on the property, or to the adjoining properties in the same district or adjoining district. The historic buildings in rural parts of the county are

generally part of a larger property holding. Even keeping a substantial amount of land open around the historic building or complex can be handled on site with clustering. Unfortunately, the property is often subdivided and thus TDR is needed to achieve the same result.

A second example of this is the hamlet-village development option mentioned previously. That zoning envisioned that not a of the land supporting the hamlet or village need be contiguous.

7.4. Universal TDR

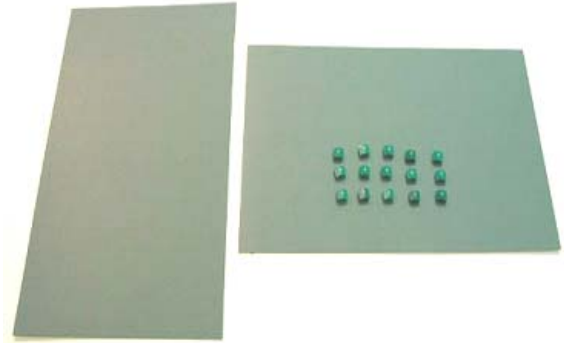
One of the problems with many TDR programs is that they are undertaken by counties with lots of resources to protect and limited development potential. The cities, Charlestown, Ranson, and Shepherdstown provide for a significant portion of the county's growth. Mac: we need to see if Harpers Ferry or others are annexing and growing. The cities do not participate in the county TDR program. Worse, annexation removes the properties with the greatest growth potential from participation weakening the program further. A Universal TDR program would involve all the county and cities. There would need to be intergovernmental agreements between the cities and the county for this to work. The county would need to make the cities the growth and development area and county zoning would be for estate type residential and rural uses. The strength of the program is it would put all the growth in the county behind the TDR program. Some receiving zones where a density increase was possible would be created, but the second major innovation is that all zoning changes would have to purchase development rights. This better harnesses the growth potential than the common TDR program since the majority of development in city and county occur through a zoning change.

While this program has great promise, West Virginia law (WVC 7-1-3mm and nn) requires a election to establish the TDR program. Because the statue applies to the county an intergovernmental agreement would be required and the comprehensive plans of the county and cities should be amended to provide the guidance. These complexities put the implementation of this beyond the scope of the current contract, but the promise is so great it ought to be explored.

8. COMPUTERIZATION

This new code will be computerized. When the first drafts of the code are prepared they will be placed on a web site for initial comment by staff, Commissioners, and possibly others. The final code will be an advanced web-based application, with extensive

Figure 16
Non-contiguous TDR



interactive capabilities including popup cross references, links to the zoning map, and other rapid navigation features. It will be available on a browser to anyone with an Internet connection.

Appendix 1

Comprehensive Plan References to Recommended Ordinance Changes

The Jefferson County Comprehensive Plan, which was adopted in 2004, contains many references to the need for updating the zoning and subdivision regulations. Each of the goal statements that referred to the need to update the ordinances is cited below:

Zoning Map

RECOMMENDATION 3.01: When adjusting the Zoning Ordinance and Map to conform with the recommendations of this Plan, the County should look closely at the adjacent jurisdictions permitted uses or their fringes so as to:

- a. Not create a competitive edge to develop in as opposed to the municipality or vise versa;
- b. Avoid conflicts in uses between any two adjacent uses;
- c. Provide for all uses including transit ional zones between and adjacent jurisdictions; and,

Create density caps where they do not currently exist

RECOMMENDATION 3.03: When considering amendments to the Ordinances and Zoning Map to incorporate decisions based on the recommendations of this Plan, the County should address the Ordinances in their entirety including:

- a. The preparation of a comprehensive “existing land use map”; and,
- b. A new zoning map showing at a reasonable scale the new boundaries of the cities.

Traffic Impact

RECOMMENDATION 3.06: Improve traffic impact studies by:

- a. Investigate traffic impact study guidelines from surrounding jurisdictions and State Department of Highways;
- b. Adopt guidelines and establish various thresholds;
- c. Research roadway mitigation measures; and,
- d. Adopt new traffic study guidelines and mitigation measures based on a, b and c.

RECOMMENDATION 3:07: The County should require the roadway pavement in residential and commercial industrial developments to be designed to standards that provide for a reasonable design life and acceptable maintenance cost. The County

should evaluate its subdivision road pavement design standards and the construction inspection and quality control process. Improve subdivision roadways by:

- a. Research roadway standards (horizontal and vertical plus pavement design);
- b. Evaluate construction inspection and quality control process; and,
- c. Create an improved roadway standard plus a construction inspection and quality control process for roadways, based on a and b.

Water Distribution

RECOMMENDATION 3.10: The County should endeavor to ensure that safe, clean drinking water is available to all citizens of Jefferson County by:

- a. Reviewing and, where necessary, revising all applicable County Ordinances to incorporate the most up-to-date standards for new well and septic construction and requiring appropriate water quality testing.
- b. Reviewing and, where necessary, revising the subdivision and zoning Ordinances to incorporate the revised standards for stormwater management design.
- c. Investigating the development of a functional water resources management plan including the identification of significant groundwater recharge areas.

Resource Protection

RECOMMENDATION 3.11: The County should review the standards regarding the treatment of sinkholes in the existing Subdivision Ordinance for possible revision and update.

Preservation of Agriculture

RECOMMENDATION 3.12: The County should investigate mechanisms to foster the maintenance of land in farm uses. Specifically, should:

- a. Invest in farmland preservation by carefully targeting the purchase of (or receipt of donated) easements on farmland.
- b. Explore the use of transferable development rights in order to ensure some tracts are perpetually available for the farming use of future generations.
- c. Support diversified rural land uses by exploring means by which to diversify farming operations. If farming is no longer economically viable, there will be no farms. Examples of this could include (but not be limited to) “value added” processing, landscape contracting businesses, equestrian facilities, agriculture education uses and bed-and breakfast inns.
- d. Improving design of residential development in the Rural District, providing incentives which ensure that cluster subdivisions are the preferred means by all parties when developing rural tracts.

Historical Preservation

RECOMMENDATION 3.13: The County should examine existing land use regulations and Planning Commission resources and explore regulation amendments and policies that encourage preservation of historic resources. Some amendments and policies the County may want to investigate may include:

- a. Rewarding the retention and restoration of historic buildings during the subdivision process with limited increased density to offset the expense of preservation.
- b. Re-evaluating zoning restrictions on the adaptive reuse of historic buildings county-wide in order to encourage their continued occupancy and maintenance.
- c. Requiring documentation of significant structures that are to be removed due to development activity.

Lighting

RECOMMENDATION 3.15: The County should encourage developers to use lighting plans that don't impinge on the "night sky".

Affordable Housing

RECOMMENDATION 3.16: The County should review its existing ordinances for possible ways to encourage more affordable housing units to be developed in the County. The County Commission may establish a countywide Housing Authority with power and authority to advocate and provide affordable housing.

Industrial Diversification

RECOMMENDATION 3.17: In order to protect the long term viability of the agriculture industry in the County, the County should encourage the diversification of the industry in Jefferson County by:

- a. Reviewing the Zoning Ordinance for ways of permitting value-added and nontraditional agriculture-related activities on farmed properties.
- b. Inserting language in the section of the Zoning Ordinance governing the Rural District that farming is a permitted land use in this district and with that use there will be side effects that are disturbing to residential development.

Transfer of Development Rights (TDR)

RECOMMENDATION 3.19: The County should explore the adoption of innovative planning concepts as discussed in the following section, including transferrable development rights and traditional neighborhood designs.

LESA System

RECOMMENDATION 3.20: The County should look closely at the LESA System and revise the requirements, including the procedures, to re-establish the original intent of this system which is to retain rural character and preserve farm land while allowing farmers to subdivide when properties are ready to subdivide by virtue of this plan and availability of certain services.

RECOMMENDATION 3.21: Once recommendation 3.20 is accomplished the County should review different zoning methods to see if LESA is still the zoning of choice for the County.

Cluster Subdivisions

RECOMMENDATION 3.22: The County should encourage cluster subdivisions as the means of housing development in the Rural District. When public or community water and sewer services in order to protect the underground water source from damage from the use of wells and septic fields.

Subdivision Development Timing

RECOMMENDATION 3.23: A concept plan for an entire tract in this district and other districts should be required when submitting an application seeking to develop only a portion of that tract, including codified standards for what should appear on the concept plan.

Growth Management

RECOMMENDATION 3.26: The area straddling new WV 9 from Charles Town to the Shenandoah River should be studied as part of the Zoning Ordinance and map amendment process to address its changing nature and re-evaluated role in the overall land development scheme of the County.

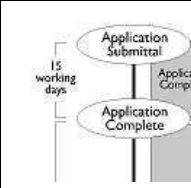
RECOMMENDATION 4.01: It is the vision of this Comprehensive Plan that development will be concentrated within the designated growth areas.

Interagency Collaboration

RECOMMENDATION 4.02: The Planning Commission should pass information on subdivision location to the Board of Education to help the Board to predict where facilities need to be built.

Stream Buffers

RECOMMENDATION 4.05: The County should investigate the legal and fiscal feasibility of requiring the dedication of stream buffer areas to the Department of Recreation and Parks during the subdivision process for the purpose of beginning a linear park system within the County.



IMPLEMENTATION PRIORITIES

1. County Land Use Ordinances and Zoning Map

Numerous recommendations in this Plan specifically pertain to the content and construction of the existing Jefferson County land use ordinances (Zoning and Development Review, Subdivision, Salvage Yard, Flood Plain and Improvement Location Permit Ordinances). These recommendations address new regulatory content, reviewing and upgrading existing design and construction standards, restructuring the land use pattern in the County and re-crafting the very format of the documents themselves. Upon the adoption of a new Comprehensive Plan, it is required by law and common planning practice to revise existing ordinances to bring them into compliance with the policies and recommendations of this Plan. This must be the first priority of the implementation of this Plan. It should be initiated immediately upon the adoption of this Plan and pursued expeditiously.